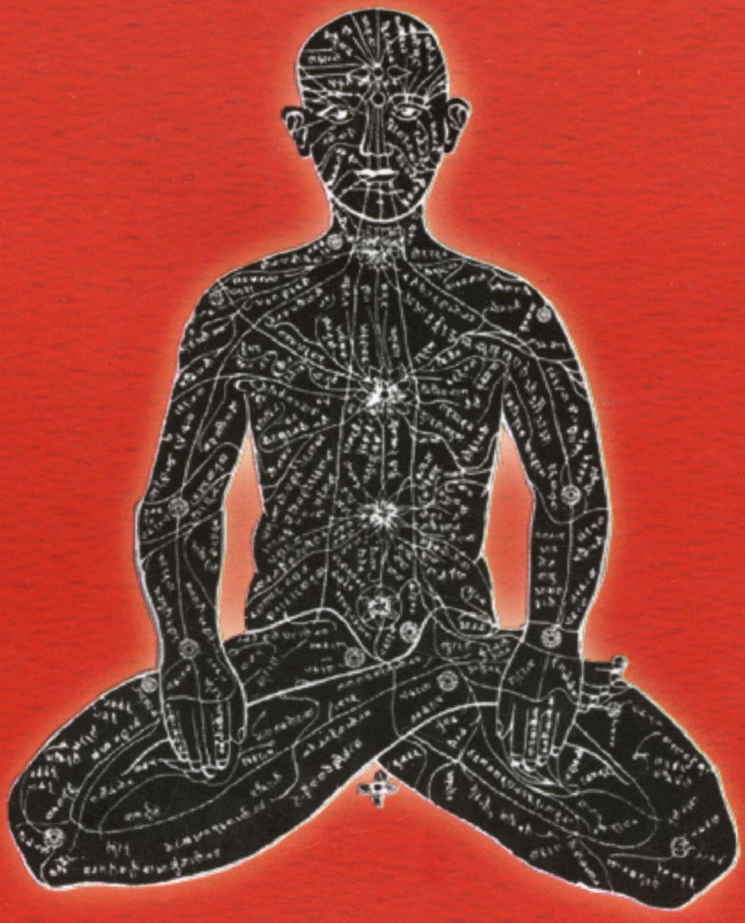
Secrets of Marma

The Lost Secrets of Ayurveda



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Chaukhamba Sanskrit Pratishthan

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Chaukhamba Sanskrit Pratishthan
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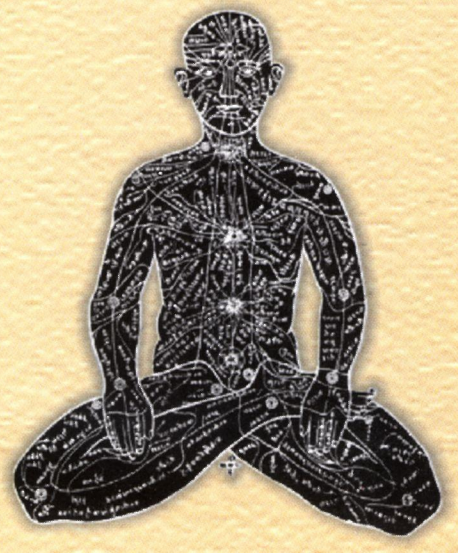
A Comprehensive Text Book of Ayurvedic Vital Points



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Secrets of Marma

Chapter 1

Historical View

Marma science is part of Vedic science. Naturally it has influenced all other sciences which we find in *Vedas* like Yoga, Ayurveda, Dance, Music, Mantra, Martial arts, Astrology, Philosophy, Siddha system of medicine and sexology. Therefore we must study its historical background.

The development of this science took place from Saraswati culture to the time period of *Charaka, Sushruta, Ashtang hridaya* and *Ashtang sangraha* and later on Buddha religion was responsible for its spread in the neighboring Countries like China and Japan.

Marma in War

The origin can be traced to *Saraswati* Culture or Indus Valley Civilization. It is known from various excavations at *Harrappa* and *Mohen-jo-daro* that people in this culture were using various types of weapons in war.

In Vedic period also people were using different weapons like axes, spears, daggers, maces, bows and arrows. These were made of copper or bronze. For defensive purpose they were using body shields. Knowledge of Marma exists from very ancient time of *Vedas,* which dates back 4000 BC. The first reference is found in *Rig-Veda.* There is reference of words like *Varman* and *drapi,* which is some kind of body armor or corselet to protect the body from the assault of enemy weapons. In *Atharva-Veda* also we find the reference of the term *kavacha* or corselet or breast-plate for the protection.

In Mahabharata the great epic also we find many references for Marma or Varman. (*Karnaparva* 19.31, *Shalyaparva* 32.63 and 36.64, *Dronaparva* 125.17, *Bhishmaparva* 95.47, *Virataparva* 31.12 and 15). It is interesting that there are references of protective clothings of the Marmas of elephants and horses also.

Arhashastra of *Kautilya* mentions the use of arrowheads made up of metal and some protective instruments against the injury to marmas.

Marma and Martial arts

Ahimsa or non-violence was taught by this religion. Monks were not allowed to use weapons even for their self-protection. Hence the art of marma was taught to all monks for unarmed self-protection.

Milindapanha text, which is a dialogue between *King Milinda* and Monk *Nagsena*, explains that unarmed self defense was taught as a part of 19 arts. This science was essential when Buddha religion started spreading beyond the boundaries of India into neighboring countries like China, Indonesia and Thailand etc. This art became effective and popular because the monks were able to protect themselves against weapons.

In the *Hohan* province of China a special monastery was built to accommodate monks traveling from India to China. This was built around 300 AD and was called Shaolin Temple which later on became famous place for teaching martial arts based on marma - or vital points described in Ayurveda. This art was kept as secret for centuries, as it was taught only to certain disciples.
As the monks started travelling to various Countries like Japan, Indochina etc. this art also spread to these countries. It is therefore very certain that the Traditional Chinese Medicine had adopted this science from Ayurveda. Hence we do come across with various references in martial art like Karate.

Marma and Yoga

From the excavations done at the site of Mohen-jo-daro, we find some interesting figures which shows that the concept of marma was applied for enriching the Yoga practice.

Marma and Sex

It is evident in Siddha system, that science of vital points has been used to increase the vigour, strength for enjoyment.

Marma and astrology

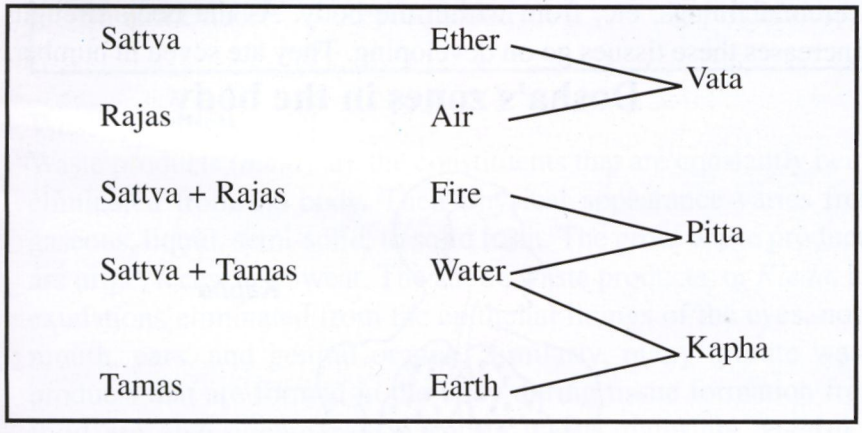
Siddha system also refers to certain vital points and the effects of phases of moon and other planets on the human body.

Chapter 2

Basic Principles

The knowledge of marma or vital points has been explained in the chapter of *Sharira sthana* of all the three Great texts (*Samhita*) e.g. *Charaka, Sushruta* and *Vagbhata* (*Ashtang hridaya* and *Ashtang Sangraha*). This chapter basically deals with the concept of embryology, development of fetus month by month etc.

Ayurveda has accepted the concept of *Sankhya* philosophy. The union of *Purusha* and *Prakruti* forms the entire universe and the animal kingdom. From the trigunas (*sattva, rajas and tamas*), the five great elements are formed and from them the three biological humors or tridoshas are formed.



Biological humors

Principle of propulsion - This is formed with the combination of ether and air elements. It is called as Vata dosha, meaning 'that which moves'. Basically it is responsible for all the gross and small movements in the body. It is the prime energy force of the body, which governs the transportation of all fluids, secretions, and elimination of waste products. At the subtle level it is called as *Prana* and is the vital force of the body. It also governs and controls mind.

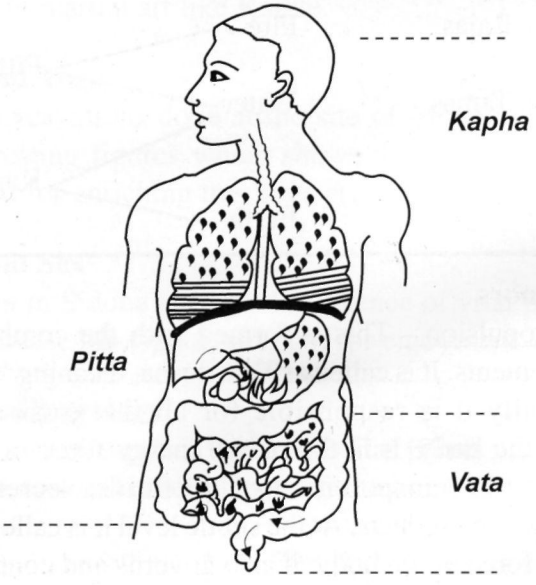
Depending on the site and function this is divided into 5 sub-doshas - *Prana, Udana, Vyana, Samana and Apana.*
The main site of Vata is in the large intestine.
Principle of Thermogenesis- or conversion is responsible for heat and transformation of food to body elements like tissues and waste products. It is called as Pitta dosha, meaning 'that which digests'. It governs the entire digestion and metabolism. At the mental level it is responsible for courage and quick decision. It is also divided in 5 sub doshas - *Pachaka, Ranjaka, Bhrajaka, Alochaka* and *Sadhaka.*

Principle of cohesion - or the energy that keeps the molecules together is called as Kapha dosha, meaning 'that which holds together'. The combination of elements of water and earth produces this biological humor. This energy is responsible for formation of new tissues and its protection from heat and wear and tear. The sub doshas are named as - *Tarpaka, Shleshaka, Avalambaka, Kledaka* and *Bodhaka.*

Tissues

The *dhatus,* or tissues, are the constituents, which do not get eliminated from the body (except the reproductive) and they remain well within a particular limit. This limit is the skin from the outside and the internal linings of the gastro-intestinal tract, bladder, joints, cerebral linings, etc. from within the body. As the body strength increases these tissues go on developing. They are seven in number.

Dosha's zones in the body



Their character and function is as follows :

Name	*Character*	*Function*
Rasa dhatu PLASMA	Circulating nutrient fluid in channels	Nutrition
Rakta dhatu BLOOD	Hemoglobin part of the blood	Oxygenation
Mamsa dhatu MUSCLE	Muscular tissue	Movement
Meda Dhatu FAT	Lubricating fat	Lubrication
Asthi Dhatu BONE	Supporting	Support
Majja Dhatu NERVE	Nerve tissue	To promote understanding
Shukra Dhatu	Reproduction	Reproduction

Waste products

Waste products (*mala*) are the constituents that are constantly being eliminated from the body. Their physical appearance varies from gaseous, liquid, semi-solid, to solid form. The gross waste products, are urine, feces, and sweat. The subtle waste products, or *Kleda,* are exudations eliminated from the epithelial linings of the eyes, nose, mouth, ears, and genital organs. Similarly, many minute waste products that are formed in the body during tissue formation from food are also considered in subtle waste materials. Health is maintained when these waste products are eliminated properly. When they accumulate in excess, various diseases are produced. While Vata is not a waste material of the bone, it is still closely related to it and contained within it. Hence most Vata diseases, such as arthritis, involve the bones.

***Srotas* - channels**

Ayurveda views the human body as composed of innumerable

channels, which supply the nutrients to the various tissues of the body. These channels are called *Srotas* in Sanskrit, from the root *'sru'*, meaning to flow. The body is likened to a system of canals or rivers, which serve to nourish the different tissues and organs of the body. They also serve to keep them clean. Moreover, they are the networks of forces that sustain and uphold them. They contain the tissues within their fabric.

The channels are similar to the different physiological systems of Western medicine but also contain subtler energy fields like the meridian system of Chinese medicine.

Types

Three channels connect the interior of the body to the outside environment and bring in nourishment to the body in the form of breath, food, and water.

1. Respiratory system - *Pranavaha Srotas*

The *Pranavaha Srotas* consists of the channels that carry (convey) *prana*-the breath or life force-and consists primarily of the respiratory system, though aspects of the circulatory and digestive systems are involved as well. Its origin is the heart and gastro-intestinal tract, since prana is not only absorbed through the lungs but also through the colon-and is distributed with the blood and plasma via the heart.

2. Digestive system - *Annavaha Srotas*

The *Annavaha Srotas* consists of the channels that carry (convey) food (*anna*), and is mainly the digestive system. Its origin is in the stomach and the left side of body. This system also called *Mahasrotas*-the great channel-as it is the main canal in the body, the gastro-intestinal tract.

3. Water metabolism system - *Udakavaha* or *Ambuvaha Srotas*

The *Udakavaha Srotas* consists of the channels that carry (convey) the water (*ambu*), or regulate water metabolism. This does not have an equivalent in Western medicine, but it is like the fluid-absorbing aspect of the digestive system. It governs the assimilation of water and water-containing foods.

Three additional channels connect the interior of the body to the outside environment and provide the elimination of substances from the body.

4. Sweat system - *Svedavaha Srotas*

The *Svedavaha Srotas* consists of the channels that carry (convey) the perspiration. Its origin is the adipose tissue and the hair follicles to which the sebaceous glands are connected. (Hence the more fat we have the more we tend to perspire.)

5. Excretory system - *Purishavaha Srotas*

The *Purishavaha Srotas*-excretory system-consists of the channels that carry (convey) the feces (*purisha*). Its origin is the colon and rectum, the organ of excretion.

6. Urinary system - *Mutravaha Srotas*

The *Mutravaha Srotas*-urinary system-consists of the channels that carry (convey) the urine (*mutra*). Its origin is the bladder and kidneys, the organs of urination.

There are seven channels-one for each tissue, mentioned above, and a separate channel for the mind. Moreover, there are two different channels in women for the menstrual and lactation systems. Thus there are 16 channels described in Ayurveda.

Chapter 3

Marma and *Sharira Rachana* (anatomy)

Sharira

Means body, and it has been defined as the one which has constant wear and tear and is composed of omni-substances *(trigunas),* five primordial pentads and the soul.

Dissection of dead body

Sushruta has emphatically stated that all physicians must have a through knowledge of anatomical structures and to get that dissection of dead human body is a must. For dissection of dead human body, one should select a healthy dead body not involved in medico-legal problems. Then wash out all the intestines and wrap up the body with the bark of the tree and special type of grass called as '*munj* or *kusha*'. Then keep the body in special wooden box having openings at all sides, and immerse the box in running water. When the body becomes quite soft after 5 to 7 days, take it out and dissect it with bamboo needles or sharp grass.

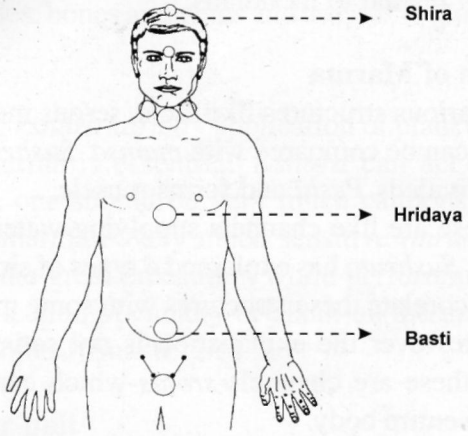
Sankhya sharira

Because of this typical method of dissection of the dead human body, *Sushruta* was able to understand the finest anatomical structures. He has explained 7 layers of the skin, 300 bones including cartilages and teeth, 210 joints, 900 *snayu* or ligaments, 500 *peshi* (*mamsa*) or muscles, 16 *kandara* or major tendons, 700 *sira* or veins, arteries and nerves.

All major texts have mentioned that total number of marmas is 107. (Su. sh. 6/2, A.S. sh. 7/1, A.H.sh.4/1) However *Charaka* has given various references of important marmas - There are 6 major vital points - Head, neck, heart, bladder, *ojus* and *shukra.* (Ch. sh. 7/6) In *sutrasthana* he has mentioned that there are 3 important vital points

- *basti, hridaya* and *shira.*

Tri - Marmas



Definition of marma

1. Marma point is defined as anatomical site where muscle, veins, ligaments, bones and joints meet together. (*mamsa, sira, snayu, asthi* and *sandhi* - Su.sh.6/2). This does not mean that all the structures must be present collectively at the site of marma.

2. According to *Ashtang hridaya* these are the points where important nerves (*dhamani*) come together along with other structures like muscles, tendons etc. *Vagbhata* says that those sites which are painful, severe tender and show abnormal pulsation (should also be) considered as marma or vital points (A.H. sh. 4/ 37). These points are the seats of 'life.' (A.H. sh. 4/ 2)

3. They are also the sites where not only *tridosha* (Vata, Pitta and Kapha) are present but their subtle forms *Prana, Ojus* (*soma*) and *Tejas* (*agni*) are also present with sattva, rajas and tamas- (Su. sh. 6 / 22, 45). Hence this is a specific area on the body, which has relation through Pranic channel to various internal organs.

4. According to another definition, they are '*Marayanti iti Marmani*' (*Dalhan*) meaning these are the vital areas, (some of them if injured) which can produce death. If marmas are injured they do not always result into death but can cause various diseases, which are difficult to cure. (*Uttara Rama Charita*). This naturally indicates that all vital points do not produce death when injured. Hence these areas can be divided into -1. Therapeutic areas and 2. Lethal areas.

5. Marma or the vital points on the body, are the junction of the body and mind. They are also important pressure points on the body much like the acupuncture points of the Traditional Chinese Medicine.

The most important difference between acupuncture points and marma is the marma points are measured in *anguli* or finger unit relative to each individual, and they are larger in size. Also these points are not related to meridians.

Composition of Marma

1. *Mamsa*- various structures like facia, serous membranes, sheaths and muscles can be compared with *mamsa. Sushruta* has stated that Vata dosha divideds *Peshi* and forms muscle.

2. *Sira* - These are like channels supplying water or energy to the field or body. *Sushruta* has explained 4 types of sira. Various experts have tried to corelate these structures with some modern anatomical structures. However the explanation is not satisfactory. Still it is certain that these are channels-*srotas*-which carry vital fluids or energy to the entire body.

a) *Vata vaha* - Those carrying Vata are hving blackish (*aruna*) colour. *Vagbhata* says that there are impulses (*praspandana*) in these types of channels. (A.S. sh.6/4) (nerves)

b) *Pitta vaha* - These are yellowish in colour. (Lymphatic vessels)

c) *Kapha vaha* - These are whitish in colour. (Lymphatic vessels)

d) *Rakta vaha* - These are reddish in colour. *Vagbhata* says that they are deep seated and carry red coloured blood. (Artery and veins)

According to *Gananath Sen*, these can be again subdivided into -

Aruna -nerve - sympathatic.

Nila - veins.

Rohini - artery.

Keshika - capillaries.

Gauri- Lymphatic vessels and

Dhamani - nerves - motor.

From the above discussion it is clear that the exact nomenclature of the different types of *sira* is very difficult.

3. *Snayu* - These are the sub tissues which bind the bones and muscles (Su. sh. 5/42). They are of 4 types - Ligamnets, tendons, sphinctor muscles and apponeurosis.

4. *Asthi* - These can be clasified into - bones proper, cartilages, teeth and nails.

5. *Sandhi* - The bony joints are again classified into -movable, partially movable and non-movable.

Vata vaha ------- (nerves)

Pitta vaha -------- (Lymphatic vessels)

Kapha vaha ------- (Lymphatic vessels)

Rakta vaha -------- (Artery & veins)

Sushruta being surgeon has stressed the importance of the knowledge of marma in surgical practice. (Su. sh. 6/44) He has stated that in any surgical procedure the knowledge of marma, and other structures like nerves, muscles, bones and veins and arteries is utmost essential. (Su. sh. 5/6)

While performing *kshara karma* - application of plant alkalies - also knowledge of marma is essentila. *Kshara* can act like surgical instrument hence one should be very much cautious. (Su. su. 11/25). The area of marma is very much sensitive (*mrudu*) hence the surgeon should take great precaution while performing procedures like surgery, application of cautery or alkali on the marma areas or near these vital points. (Su. su.12/5)

Individual finger unit

All marma areas have been explained in *anguli parimana.* This is the finger unit of respective individual. For assessing the individual finger unit-

1. Join both open palms at ulner side. 2. Measure the width of both palms at metacarpo-phalangial jointts. 3. Divide this by 8 (as this width is average for 8 fingers). 5. This is individual finger unit.

Acupuncture and Ayurveda

The science of acupuncture has its roots in *Vedas*. The first reference of acupuncture is found in *Rig-Veda* and at that time separate text was available which was known as *'Suchi Veda'*. Unfortunately this text is not available today. During ancient period, bamboo or wooden *Suchi* - needles were used for acupuncture. Sushruta has mentioned the art of acupuncture under *Vyadhana* or *Bhedana Karma*. During ancient time needles made up of wood were used, later on various metal needles were used for this purpose.

Ref.

1. *Charaka- sutra* 7, 10, 11, 17 *nidana, chikitsa* 3, 12, 13, 17
2. *Sushruta- sutra* 16, 25; *sharira* 6, 7, 8 *nidan* 19, *chikitsa* 26, *Kalpa* 2, 8,
uttara 22,
3. *Ashtang hridaya- sharira* 4, 5
4. *Ashtang sangraha- sutra* 19, 37,
sharira 5,6, 7, *chikitsa* 6, 7, 8, *Kalpa* 3, 6.

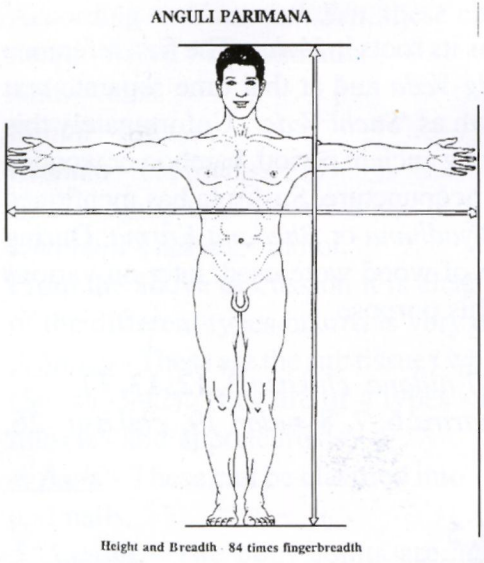
Chapter 4

Marma and Siddha System

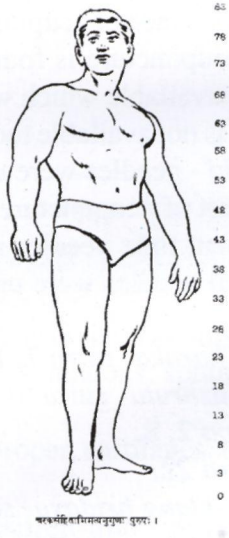
According to Siddha system, the entire universe is originated from the union of Lord *Shiva*-matter and his wife *Parvati*-energy. Logically *Shiva* itself represents both matter and energy. The word *Shiva* is originated from *Vasi,* which means breathing.

It is very similar to Ayurveda, and therefore explains that the union of matter and energy is responsible for formation of five primordial elements. The basic principle of 'Universe is macrocosm and Man is microcosm' has been accepted by this science.

Siddha system is based on 96 principles, which have been divided in three groups. The first and second group consists of 30 principles each while the third group has 36 principle making it to 96 in all.



Height and Breadth - 84 times fingerbreadth



चतुरशीतिरङ्गुलमानपुरुषः ।

1. First group of 30 tatvas or principles

These principles include 5 great elements, 5 sense organs, and their 5 objects, 5 motor organs and their 5 actions and mind, knowledge, passion, will and wisdom.

2. The second group of 30 principles

This consists of 10 nerves, or pulses or *nadis* controlled by tridoshas. 10 sub-types of Vata, 5 *ashaya* and 5 *kosha.*

3. The third group of 36 principles

Six chakras- *Mooladhara, Swadhishthana, Manipura, Anahata, Vishudda,* and *Ajnya;* 3 *Mandala*- Agni, Sun and Moon; 3 waste products selfishness, greed and jelousy; 3 doshas- Vata, Pitta and Kapha; 3 goals of life - wealth, social duties and reproduction, 3 qualities - *sattva, rajas, tamas.* 8 diseases- passion, hatred, misery, animosity, indifference, envies, stubbornness and lust. 2 actions-good deeds and bad deeds, 5 stages of diseases- in brain, neck, heart, umbilicus and sexual organs.

According to Siddha system, all the marmas are invisible but could be traced or located at point where body, mind and psychic energies are concentrated together. Marma is nothing but blockage of vital energy (*Vasi*) in the body. This blockage could be due to - external physical injuries, psychological passions and their effects through doshas. This effect can be felt at the psychic energy. Therefore marmas can be controlled by psychic powers. These points are called as *'maitheenda kalam'*. In short marma is the point on the body where the blockage of the energy is felt. This is used for enhancing the psychological powers by the use of *mantras* as well as by Yogic methods also. The cosmic forces also have direct effect on the body through 'tithi varman' a concept, which has not been described in any other science. 'Tithi' is the phase of the moon and its effect on the body takes place through certain marma points. The marmas are divided in two types- Padu Varman and Thodu Varman. The place where the energy is blocked is called as Padu varman. They are 12, and points where this energy has to struggle to get through are called as Thodu varman. There are 96 such such sites. Each Padu varman is the junction of 8 Thodu varman sites.

Padu varman - are nothing but meridians travelling through the entire body. These are sub divided in -Siva Kalai (male), Shakti kalai (female) and Parama kalai (both energies together).

1. Thilartha kalam- This meridian is located in the center of the two eyes. This is Sthapani marma in Ayurveda.
2. Pidari varman- This meridian is similar to the ida *nadi* in Yoga.
3. Sumani varman- This is at the site of Vishudha *chakra* in Yoga in the throat.
4. Ner varman - The site is at Hridaya.

5. Urumi kalam- the site is at Manipura *chakra.*
6. Kallidai kalam - This is between the two testicles.
7. Natchathira kalam - This is similar to Apanga marma in Ayurveda.
8. Sevi Kutri kalam - At the site of Shrungataka marma.
9. Urakka kalam - This is at the center of the jawbones.
10. Adappu varman - Located in the chest.
11. Periya Asthi Churukki - Located one finger below the floating rib cage.
12. Siriya Asthi Churukki - Located one finger below the above merma.

Many textbooks have refereed this as the science of 'Thanuology - Science of *Varman'*. This science deals with various signs and symptoms that are produced due to injury to marma points, different types of external and internal treatment for preventing diseases and for treating them.

Sage Agastya is considered as the founder of Science of *Varmam* or Marma.

Some Siddha texts have explained 122 Vital points are divided in six types as how they can be influenced for treatment purpose.

1. Thodu Varman (by touch) -	96
2. Thattu Varman (by blow) -	08
3. Thadavu varman (by massage) -	04
4. Nakku varman (by licking) -	01
5. Nokku varman (by sight) -)	01
Total -	122

According to this system, if marma is injured, then it must be treated in proper time, otherwise it can produce disease. Apanga marma if injured, must be treated within 27 *Nazhigai* (1 nazhigai = 2 and 1/2 minutes). This means, that this injury should be treated in one hour. Similarly injury to bruhati marma if not treated properly can produce disease like *rajayakshma* or tuberculosis in 400 days.

The Siddha system has elaborately described various decoctions and herbal formulas to protect the body from the injuries to marmas and to treat the marma injuries also.

Chapter 5

Marma & Martial Arts

Martial art can be defined as systematized technique of warfare, with proper knowledge of body anantomy and marma points. This needs concentration on vital energy points, point of contact, stability as well as agility of the body including the speed, fluency in the fast and rapid movements of the body.

In martial astrs marma points are classified in various groups - a) those which will cause instant death, b) those which will cause loss of consciousness and c) those which will cause severe pain and numbness with deformity of the part. References of martial art can be found from *Rig -Veda, Dhanurveda, Vishnu Purana* and *Mahabharata.*

'Kalari Payat' (kerala) and *Kalari Payirchi* (Tamil Nadu) is traditional martial art still practised in South India in the region of Kanyakumari or Tamil Nadu. Kalari Payat means battelfield practises. There are two styles of Kalari - Northern and Southern

The highest form of of martial arts is called as Marma *Adi,* or Varma Adi. This means Martial art in which nerve centers are striked with efficacy. Various types of weapons were used during these different types of martial arts like wooden staff, deer horns, or different types of axes. Although Buddhism gradually declined, this art remained very popular in South India, and was preserved there. From this art of self -defence, originated the *Varma Kalai* or *Varma chikitsa.* An expert in this field is called as *'Aassan'*. These physicians occupied important post as one of the Royal Physician. It must be remembered here that in Tamil language the word *Va* (as in the pronounciation of the word wonder) is used in place of *Ma* or *Ba.* Therefore they call Marma as Varma or they use word *Vasti* for *Basti.*

In Tamil language many manuscripts are available on this secret art of marma like *Varma soothiram, Varma peerangi, Varma thiravugole, Varma ponosi, Varma kundoci, Varma gurunadi.* These manuscripts

describe in detail regarding various types of marma, their effects when injured the treatments of these injuries etc. In *Varma soothiram* it has been explained that science of marma deals with the life of the people, hence this must not be taught to the people having bad intentions or bad characters, otherwise it will end as an evil to the entire society.' Hence this knowledge must be taught to those only who has good moral character and have love for their patients.

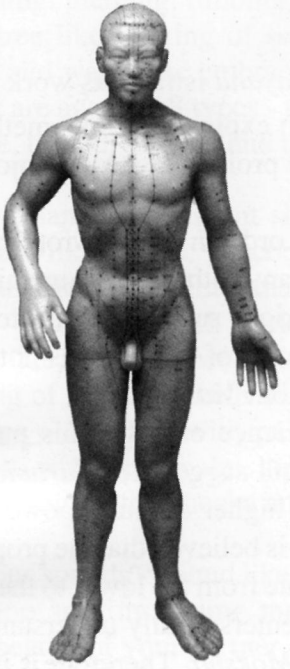
Varma points in Martial Arts

There are 64 Marma points used in this technique of warfare. Many of these marma points are similar or very near to Ayurvedic Marma points.

Following is the description of the some of the important vital points-

1. Konda Kolli - Adhipati. Top of the crown.
2. Sanguthiri - Nila. Center of the throat
3. Kannadi kalam - Phana. Center of the nose
4. Kuttri Kalam - Vidhura. Tip of mastoid bone.
5. Poikai Kalam - Utkshepa. 3 fingers sup. to upper tip of ear.
6. Kamboori kalam - Apanga. Slightly below lateral corner of eye
7. Nama Varman - 1 finger above Sthapani, on the center of forehead.
8. Suzhizadi Varman - Krukatika.
9. Medichi Varman, Udal Surukki and Vayu Kalam - In the viscinity of Nabhi Marma.
10. Kakattai Kalam - Amsa. End of the shoulder blade
11. Sakthi Varman, Ner Varman - Hridaya.
12. Vithu Varman, Nangu Kuttri and Kallidai Kalam - Muladhara chakra. Bottom of testicles.
13. Enthi Kalam - Below Stanamula.
14. Retth Saya Thummi Kalam - Close to Stanarohita
15. Valamburi - Slightly below kukundara.
16. Rettha kalam - Manya marma
17. Kaikoottu Kalam - Kakshadhara.
18. Kuthu Varman - Lohitaksha
19. Amirtha Varman - Close to Kurcha.
20. Pada Varman and Vellai Varman - Talahridaya.
21. Tithi Varman - Near Kurpara.
22. Muttu, Uru and Mulankai kuyyam - Janu marma.
23. Kavali Kalam - Kshipra.
24. Manibantham - Manibandha.

25. Madakku Varman - Kurpara.
26. Viboothi Kalam - Indrabasti.
27. Thilatha Kalam - 1 finger below Sthapani.
28. Urumi Kalam or Pandri Varman - Between Hridaya and Nabhi.
29. Natchathira Kalam - Very close to Apanaga marma.
30. Savikutti Kalam - Shankha marma.



Types of Strikes used in Martial Arts

Mainly hand and feet are used for different types of hits or strikes. The major types are as follows-

Hammer fist blow, Side fist blow, Direct hit using the front part of the fist, Punch by using all the fingers closing, Blow with the back of the hand.

One finger punch, Hammer thumb blow.

Blow with open palm, Blow with side of the palm - ulner margin.

Blow with the base of the palm.

Blow with the adge of the wrist.

Direct hit by using elbow.

Direct hit by feet, toes, heel or the side of the feet.

Many of the above hits and blows are used in Karate also.

Chapter 6

Marma and Sexology

Kamasutra by *Vatsyayana* is famous work on sexology. This is classical work, which explains various methods and techniques for sustained and prolonged sexual enjoyment or *Kama*

The funder of this science is Lord *Shiva,* who wrote thousand chapters on this subject. Afterwards many authors like Aupanishadhikam have written large volumes on various subjects connected to the science of sexology. Unfortunately most of this work is not available today other thatn the work carried out *Vatsyayana.*

Common people use this science only for this purpose, however many sages and ancient Tamil sagge like *Thirumoolar* have used these methods for attaining higher spiritual powers for achieving *Moksha* or self realisation. It is believed that the proper use of sexual energy can be used to penetrate from the lower to the higher *chakras,* stimulate the brain and its centers finally understanding the reality about the Self or achieving *Moksha.* Therefore it is the opinion of many persons that science of Yoga and sex cannot be seperated from each other. According to Siddha system this can be achieved with the proper use of knowledge of Varman. There are two important texts available in Tamil language - 1) *Panch Patchi* of Sage *Agastya* and 2) *Kokkoham* by *Pandiya Kings.*

In Siddha system the term *'Vasi'* is known for vital energy or creative principle and is equated with the creative serpent power. If we consider the figure of brain with its spinal cord, it looks exactly like serpent. In Yoga it is considered that the serpent power or kundalini is lying dormant at the base of the spine and when it is awakened, it rises and penetrates all the 7 *chakras* and then the person achieves the true knowledge. The sexual energy is at the root and its proper use can be made for awakening the kundalini power.

Types of Sexual enjoyment

Vatsyayana has described in all 64 types of enjoyment of sex. He

has described embracements, kisses, nail marks, teeth marks, strikes, making sounds, mouth applications and using pressure points for extreme arousal. These 8 types are again divided into further 8 sub-types making the total of 64.

1. Embracements - Even in Atharva Veda and Rig-Veda we find the mention of how man should embrace his wife. Vatsyayana has described touching, piercing, rubbing, pressing, turning as creeper, climbing of a tree like, mixing of sesame seed and rice like and mixing of milk and water like embraces during the intercourse.
2. Kisses- They are again of 8 types - nominal, throbbing, touching, straight, oblique, turned, pressed and the one during greatly pressed embrace.
3. Nail Marks- Snapping, crescent shaped, circle like, linear nail mark, tigers claw like marks, peacock's foot nail mark, jumping hare nail merk and lotus petal nail mark.
4. Teeth marks - The latent teeth mark, swollen bite, pointed, chain of points, coral like, chain of beeds like, teeth mark like margin of cloud, and biting of boar like teeth marks.
5. Gentle Strikes - Striking with palms back, with slightly bent fingers, with fist, with open palm, striking on the breasts, striking on the head, striking on the cheeks and striking on the sides of the chest.
6. Making various sounds - Sound like thunder, Humming, Sobbing, Cooing, Bamboo spliting, Some meaningful words, Sounds of describing the beauty of your partner etc.
7. Using mouth during the intercourse - Lightly kissing neck, kissing and biting the sides of the nape of the neck, Rubbing like kissing on the chest and abdomen, sucking like kiss or swallowing like kiss on any other part of the body.
8. Pressure points - Siddha system has elaborately delt with various pressure points and have explained different ways for handling ambrocial areas. These are linked with the phases of the moon. During each phase certain ambrosial places gets activated. If they are stimulated on those days, then one can enjoy unlimited sex.
These pressure points are linked with Varman We are describing some important points here -
Pirathamal - On the first day of the new moon, the Amirtha Varman at the base of the first toe of the left leg of the female and right leg of the male gets stimulated.
Thuthikai - On the second day of the new moon, the sites of ambrosial places are Pada Varaman, Vellai Varman and Sundu Varman.

Chapter 7

Marma Types

1. According to the structure- *Mamsa* - Muscle -

Name	A.Hridaya	A.Sangraha	Sushruta
Indrabasti	4	4	4
Tala hridaya	4	4	4
Stana rohita	2	2	2
Guda	—	1	1
Total	**10**	**11**	**11**

***Sira* - Arteries and Veins-**

Name	A.Hridaya	A.Sangraha	Sushruta
Bruhati	2	2	2
Sira Matruka	8	8	8
Nila	2	2	2
Manya	2	2	2
Kakshadhara	2	—	—
Phana	2	2	2
Vitapa	2	—	—
Hridaya	1	1	1
Nabhi	1	1	1
Parshvasandhi	2	2	2
Stanamula	2	2	2
Apalapa	2	2	2
Sthapani	1	1	1
Urvi	4	4	4
Apastambha	—	2	2
Apanga	—	2	2
Shrungataka	—	4	4
Total	**37**	**41**	**41**

Snayu - **Tendons and Apponeurosis -**

Name	A.Hridaya	A.Sangraha	Sushruta
Ani	4	4	4
Kurcha	4	4	4
Kurchashira	4	4	4
Kshipra	4	4	4
Amsa	2	2	2
Utkshepa	2	2	2
Basti	1	1	1
Apanga	2	—	—
Vitapa	—	2	2
Kakshadhara	—	2	2
Vidhura	—	2	2
Total	**23**	**27**	**27**

Asthi - **bone-**

Name	A.Hridaya	A.Sangraha	Sushruta
Katikataruna	2	2	2
Nitamba	2	2	2
Amsaphalaka	2	2	2
Shankha	2	2	2
Total	**8**	**8**	**8**

5. *Sandhi* - **Joint-**

Name	A.Hridaya	A.Sangraha	Sushruta
Janu	2	2	2
Kurpara	2	2	2
Simanta	5	5	5
Adhipati	1	1	1
Gulpha	2	2	2
Manibandha	2	2	2
Kukundara	2	2	2
Avarta	2	2	2
Krukatika	2	2	2
Total	**20**	**20**	**20**

6. *Dhamani* -Nerve

Name	A.Hridaya	A.Sangraha	Sushruta
Guda	1	—	—
Apasthambha	2	—	—
Vidhura	2	—	—
Shrungataka	4	—	—
Total	**9**	**—**	**—**

Total according to structure

Structure	A.Hridaya	A.Sangraha	Sushruta
Mamsa-muscle	10	11	11
Sira	37	41	41
Snayu	23	27	27
Asthi	8	8	8
Sandhi	20	20	20
Dhamani	9	—	—
Total	**107**	**107**	**107**

2. According to the site-

Sakthi - Legs- 22

Kshipra, Talahridaya, Kurcha, Kurchashira, Gulpha, Indrabasti, Janu, Ani, Urvi, Lohitaksha and Vitapa- 2 in each extremity.

Udara and Ura - Abdomen and Chest- 12

Guda, Basti, Nabhi, Hridaya one each; Stanamula, Stanarohita, Apalapa and Apasthambha 2 each.

Bahu - Arm - 22

Kshipra, Talahridaya, Kurcha, Kurchashira, Manibandha, Indrabasti, Kurpara, Ani, Urvi, Lohitaksha and Kakshadhara- 2 each.

Prushtha - Back -14

Katikataruna, Kukundara, Nitamba, Parshvasandhi, Bruhati, Amsa, and Amsaphalaka- 2 each.

Jatru-urdhva - Above clavicle- 37

Krukatika, Vidhura, Phana, Apanga, Avarta, Utkshepa, Shankha 2 each, 1 Sthapani, 5 Seemantaka, 4 Shrungataka; 8 Sira Matruka, and Nila and Manya (four dhamani).

Legs - 22

Arm and forearm - 22

Abdomen - 03
Chest - 06
Back - 14
Head and neck - 37

3. According to size

1.One finger breadth (Anguli Parimana) - In this type there are four marmas- Urvi, Kurcha-sira, Vitapa and Kakshadhara (Total 12).
2. Two finger breadth - In this type there are three marmas- Gulpha, Manibandha and Stanamula (Total 6).
3. Three finger breadth - In this type there are two marmas- Janu and Kurpara (Total 4).
4. Fist size or Four finger breadth - In this type there are ten marmas- Kurcha, Guda, Basti, Nabhi, Hridaya, Manya, Sira-Matruka, Simanta and Shrungataka (Total 29).
One Half finger breadth - Rest all (Total 56).

4. According to Symptoms - when injured

Causing immediate death (*Sadyha Pranahara*) -
4 Shrungataka, 1 Adhipati, 2 Shankha, 8 Sira-Matruka, 1 Guda, 1 Hridaya, 1 Basti and 1 Nabhi. They are predominantly agni in nature, hence they can cause death in 7 days.
Causing death after some time (*Kalantara Pranahara*) -
2 Talahridaya, 4 Kshipra, 4 Indrabasti, 8 Vaksha Marma (marmas in chest- Apalapa. Apastambha, Stanarohita, Stanamula, 5 Simanta, 2 Katikataruna, 2 Parshva-sandhi, 2 Bruhati, and 2 Nitamba.These are composed of water and fire elements (saumya), hence they can cause death in less than 15 days.
Causing death if the foreign body is removed (*Vishalyaghna*) -
2 Utkshepa and 1 Sthapani. They are predominantly Vata in nature.
Causing disability (*Vaikalyakara*) -
4 Lohitaksha, 4 Ani, 2 Janu, 4 Urvi, 4 Kurcha, 2 Vitapa, 2 Kurpara, 2 Kukundara, 2 Kakshadhara, 2 Vidhura, 2 Krukatika, 2 Amsa, 2 Amsa-phalaka, 2 Apanga, 2 Nila, 2 Manya, 2 Phana, 2 Avarta. They are predominantly water element in nature.
Causing severe Pain (*Rujakara*) - 2 Manibandha, 4 Kruchra-shira and 2 Gulpha (Total 8)

Sadyha Pranahara - 19
Kalantara Pranahara - 33
Vishalyghna - 03
Vaikalyakara - 44

Rujakara - 08

According to *Sushruta,* the *Sadyha Pranahara* are composed of all 5 important factors like veins, ligaments, muscles, bones and joints. Those belonging to *Kalantara Pranahara* type are composed of only 4 factors. *Vishalyghnakara* type is composed of 3 factors. As long as the forign body is not removed, the person survives. But he will die immediately when it is removed. *Vaikalyakara* are composed of 2 factors and only one factor is present in *Rujakara* type.

A. Hridaya - Ashtanga Hridaya
A. Sangraha - Ashtang Sangraha

Chapter 8

Marma & Yoga

Chakras

According to Tantra Yoga, there are six chakras-nerve centers-distributed throughout the body in addition to the main brain center called the *sahashrara*. The main three *nadis-Ida, Pingala* and *Sushumna*-connect these chakras to the brain.

1. Muladhara Chakra

The *Muladhara Chakra* is also known as the root center. It is situated in the perineum, at the base of the spinal column. This *chakra* is in correlation to the inferior hypogastric plexus of nerves, which supplies the region of external genitals. It has in it's center, a triangle, from which the *sushumna* begins and which (*the sushumna*) ends at the top of the head. This *chakra* is related to the primordial element of earth, the sense organ of the nose, and has four crimson-colored petals. Its *bija* (Seed) *mantra* is *Lam.*

2. Swadhisthana Chakra

The *Swadhiathana Chakra* is known as the sex center, as it is situated in between the genitals. This is in close correlation with thw upper hypogastric plexus. This *Chakra* is related to the primordial element of water, has a white crescent moon in its center, is related to the sense organ of the tongue, and has six petals. Its presiding deity is *Vishnu,* and its *bija mantra* is *Vam.*

3 Manipura Chakra

The *Manipura Chakra* is known as the naval center, and is situated at the umbilicus. It is in close association with the coelic or solar plexus. The red triangular mandala in its center contains the primordial element of fire. It is related to the sense organ of the eye and has ten petals, which are of a dark purple color. The presiding deity is *Rudra,* and the bija mantra is *Ram.*

4. Anahat Chakra

The *Anahata Chakra* is situated in the heart region and hence is known as the *heart chakra*. It is in correlation with the cardio-pulmonary plexus. It is related to the primordial element of air, the sense organ of the skin, and has twelve petals of a deep red color. The *bija mantra* is *Yam,* and the presiding deity is *Isha.*

5. Vishuddha Chakra

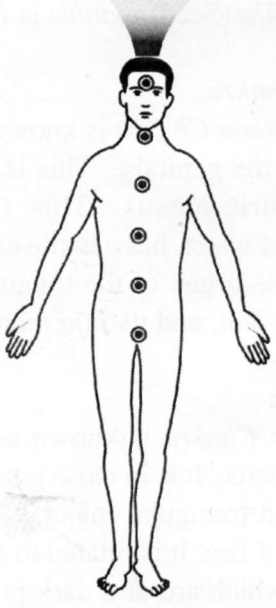
The *Vishuddha Chakra* is situated in the region of the throat, and hence is known as the *throat chakra*. Within a pure blue circle is the primordial pentad of space, the sense organ of hearing and has sixteen smoky purple petals. The presiding deity is *Lord Shiva*, and the *bija mantra* is *Ham.*

6. Ajna Chakra

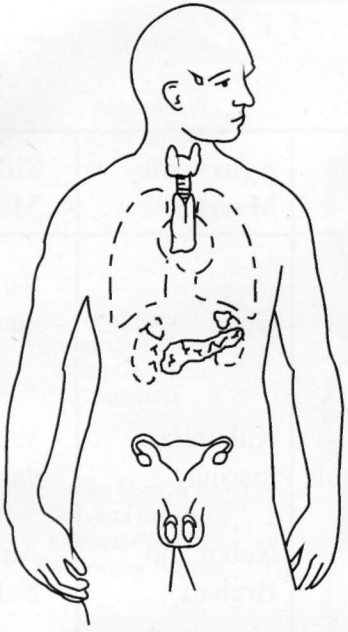
The *Ajna Chakra* is situated in between the eye-brows, and has only 2 petals of a pure withe color. This is known as the *"third eye"* center. *Om* is the *bija mantra*, and the presiding deity is *Paramashiva*. It is in close relation with the hypothalamus, limbic system, and the neighbouring region with connections to pituitary gland.

7. Sahashrara Chakra

The *Sahashrara Chakra* is the brain, and it has been described in yogic texts as having a thousand and one petals.



The Seven Chakras


Chakra 6 - Pituitary
Chakra 5 - Thyroid, Parathyroid
Chakra 4 - Thymus
Chakra 3 - Pancreas
Chakra 2 - Overies, Adrenal
Chakra 1 - Testes

The Chakras & the Endocrine systems

The science of Yoga is one of the sciences that we find in the tressury of Vedic knowledge. Great sage *Patanjali* in his *'Yoga Sutras'* has explained this science in detail. Ayurveda is the science of life or longevity and Yoga is the science of linking the individual self with the Universal Self. Both the sciences of Yoga and Ayurveda have evolved from the same philosophy, culture and country. Yoga tries to expand the narrow constricted egoistic personality to the all-pervasive, eternal and blissful state of reality.

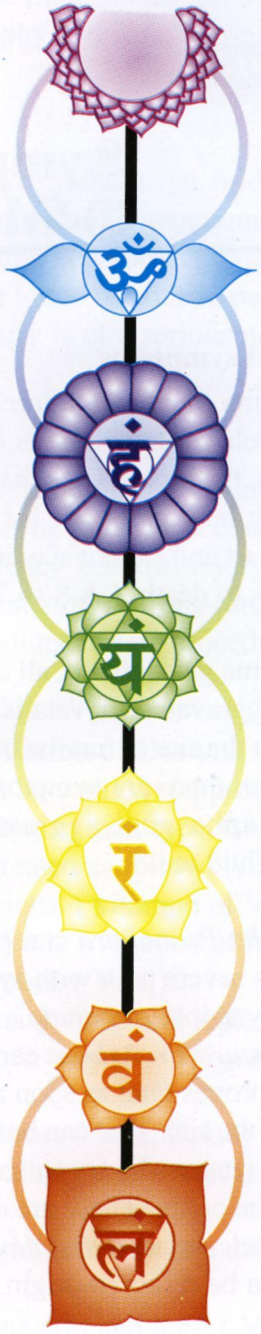
There are various types of Yoga practises. *Hatha Yoga, Raja Yoga, Bhakti Yoga, Dhyana Yoga, Mantra Yoga, Jnyana Yoga, Karma Yoga* etc. Out of these types *Hatha Yoga* is very much popular.

Hatha Yoga explains that there are series of six subtle centers or *chakras* which, are connected by nadis or channels to different organs in the body. *Shiva Samhita* explains that there are 3,50,000 nadis out of which 14 are the major channels. (Please see 'Health and Disease in Yoga and Ayurveda' for detail explanation). The Siddha system is very similar to that of Ayurveda. It seems that this system has amalgamated the principles of Ayurveda and Yoga together. They have accepted 72,000 nerves or nadis, which are connected to different chakras.

Chakras and Marmas-

Name	Plexus and Glands	Ayurvedic Marma	Siddha Marma
Muladhara	Sacral, coccygeal plexus, Tastes	Guda	Kundalini marma
Svadhishthana	Hypogastric, lumbar plexus Ovaries and adrenals	Kukundara marma	Vallurumi varman
Manipura -	Solar, Coelic plexus, Pancreas	Nabhi and Bruhati	Anna Kalam
Anahata	Cardiac plexus, Thymus gland	Hridaya marma	Ner varman
Vishuddha	Cervical, carotid, pulmonary plexuses, thyroid, parathyroi	Nila, Manya	Sumai varman
Ajnya	Cavernous plexus, optic chiasma, thalamus	Sthapani	Thilartha Kalam
Sahasrara	Brain	Adhipati	Uchi varman.

MARMA - CHAKRA - PLEXUSES



Adhipati
Ant. fontanale

Sahasrara
Thousand petals
Ether, Violet
Bliss

Sthapani
Cavernous plexus
Optic Chiasma
Thalamus

Ajna
Two petals
Ether, Indigo
Consciousness

Nila Manya
Cervical plexus/
Carotid Plexus/
Pulmonary Plexus

Vishudha
16 petals
Ether, Blue

Hridaya
Amsaphalaka
Cardiac plexus

Anahata
Air, Green
Twelve Petals

Nabhi
Bruhati
Solar plexus/
Coeliac Plexus

Manipura
Fire, Yellow
Ten Petals

Kukundara
Hypogastric plexus/
Lumber Plexus

Svadhishthana
Water, Orange
Six Petals

Guda
Sacral or
Coccygeal plexus

Muladhara
Earth, Red
Four Petals

Chapter 9

Symptoms of injury to Marma

General symptoms

When the marma points are injured, the person rolls in bed due to severe pain, feels as though he is entering into emptiness. He also feels giddiness, restlessness and has difficulty in breathing. Due to severe debility he cannot lift his legs and hands, feels burning sensation in heart and cannot stay in any posture for a long time and soon succumbs to death. (A.S.sh.7/26-27)

When any marma gets injured, all doshas - Vata, Pitta or Kapha, are bound to get aggravated. If Vata is aggravated, then there is severe pain not only at the site of marma but in the whole body. If Pitta gets aggravated, then there are symptoms like inflammations, bleeding etc. When Kapha gets aggravated then there is swelling, accumulation fluid etc.

Injury to *Sadyha Pranahara* can prove fatal within 24 hours, and usually there is severe pain with syncope. The death can result due to *murchha* - syncope, *stabdhata* - shock or *sanyasa* - coma.
Injury to *Kalantara Pranahara* can prove fatal within 2 weeks.
Vishalyaghna proves fatal as soon as the foreign body or weapon is taken out from the site. This can be fatal due to slow loss of blood or septicaemia or tetanus. Injury to *Vaikalyakara* results into maiming or deforming the organ. These are du to the injury to tissues, bones, nerves and vessels. Injury to *Rujalara* results into severe and constant pain, which can be reflex in origin.

Any injury of penetrating or lacerating type will naturally produce hemorrhage and loss of blood. Apart from that if it involves *Sira* type of marma (veins and arteries), then definitely there will be severe blood loss. These symptoms are found when Urvi, Lohitaksha

or Bruhati marmas are injured. If the joint is injured it will be difficult to carry out any movement of that joint as in the case of Janu, Manibandha or Kurpara mamrma. Injury to the *Mamsa* marma, will result into paresis, paralysis, atrophy or edema of the muscle. These symptoms are found when Indrabasti, Talahridaya, or Amsaphalaka are injured.

Injury to any of the main marma like shira - head, hridaya- heart and basti- kidney-bladder will result into various symptoms ranging from internal hemorrhage, coma, irregular heart beats (*shira and hridaya*) urine with blood, extravasation of blood or urine in peritoneal cavity (*basti*) shock and pain. If the injury is of a serious nature, then the person will die immediately.

Specific symptoms

Symptoms also depend on which adjoining structure has been damaged along with the main marma injury. For example injury to Vitap marma, results into impotency because injury damages the spermatic cord. Sometimes patient suffers from cardiac arrest due to shock or pain as in case of handling certain procedures of rectum or anal canal (Guda marma).

Marma injury, diseases and Vitiation of Doshas

After injury to marmas, there can be various symptoms like pain or disability or sudden death, according to their type. But besides these some specific diseases are also created as follows- (A.H. sh. 4)

1. Kshipra - *Akshepaka* - convulsions. (vitiation of Vata and *rakta*)
2. Talahridaya - severe pain and death. (vitiation of Vata and *rakta*)
3. Kurcha -severe pain and tremmors. (Vata)
4. Kurcha-shira - pain and oedema in hand and legs. (all doshas)
5. Gulpha -*Urustambha*, *shandhatva* - rigidity in legs and impotency. (Vata)
6. Indrabasti - death due to blood loss (Vata, Rakta)
7. Janu - *Khanja* - difficulty in walking due to weakness in legs. (Vata)
8. Ani - *Urustambha* - edema, rigidity in legs and difficulty in movements. (tridosha)
9. Urvi - Blood loss, atrophy of the arm and legs. (Vata, Rakta, mamsa).
10. Lohitaksha - *Pakshaghata* - hemiplegia. (Vata).
11. Vitapa- *Shandhatva*- impotency. (Vata)
12. Guda - Instant death (Vata).

13. Apalapa -Severe blood loss and death (Rakta,Pitta, kapha).
14. Apastambha - *Kasa and Shwasa*- cough and asthama. (Vata, Kapha)
15. Katikataruna- *Pandu* - anaemia. (rakta)
16. Basti, Nabhi and Hridaya- instant death (Prana vayu)
17. Vidhura - *Karnabadhirya* - deafness. (Prana Vata)
18. Apanga - *Andhatva* - blindness. (Prana Vata)
19. Avarta - *Andhaatva* - blindness. (vata)
20. Utkshepa - If the foreign body is removed -death.
21. Simanta - *Unmada* - mental instability. (Vata)
22. Shankha, Shrungataka, Adhipati - instant death (Prana Vata)
23. Nila, Manya - Loss of speech, deformed speech, blood loss. (Vata, Rakta)
24. Phana - *Agandhadnyana* - anosmia. (Prana Vata) (A.S. sh.7)
25. Basti - *Ashmari* - stone in bladder. (tridosha)
26. Nitamba - *Adhakayashopha* - edema on the legs. (Vata, Kapha)
27. Amsa - Frozen shoulder (Vata).
28. Amsaphalaka - *Bahushosha, swapa* - atrophy of arms and excess sleep. (Vata)
29. Stanamula - *Kasa, Shwasa* - cough and asthama. (Vata, Kapha)
30. Stanarohita - *Kasa, Shwasa* - cough and asthama. (Vata, Kapha) (S. Sh.8)

Difficult to treat symptoms (asadhya laxana) and marma involvement

Fever (*Jwara*) - In gambhira jwara there are symptoms like loss of function of all sense organs, dyspnoea (*shwasa*) Hridaya.

Diarrhoea - (*Atisara*) - dyspnoea, cough (*shwasa, kasa*) - Guda, Hridaya.

Piles - (*arsha*) - edema on feet, hands- Vitapa, Hridaya.

Jaundice (*Kamala*) - Coma, loss of sensations- Hridaya.

Bleeding disorders (*Raktapitta*) - Dyspnoes, pain in chest - Hridaya, Shira

Pulmonary tuberculosis (*Rajyakshma*) - Dyspnoea, polyuria - Basti, Hridaya.

Asthama (*shwasa*) - Hridaya.

Coma (*Murchha*) - Hridaya.

Sannyasa, Madatyaya, Unmada - Hridaya.

Stone in KUB (*ashmari*) - Basti, Nabhi, Vitapa.

Ascites (*Udara*) - Edema on abdomen and on the penis- Apanga, respective diseases and some texts have also mentioned herbal

recipes for treating these diseases.

1. Marma kashaya

This decoction containing ten roots, root of castor oil plant, adhatoda vasika, mucuna prurience, comiphora mukul, rasna and withania somnifera. The person whoes marma has been injured should take 15 to 30 ml. of this freshly made decoction 3 times a day for 7 days.

Depending on the type of symptom, one can easily find out which dosha is aggravated, and then accordingly one can treat the symptoms or the disease proper resulting out of the injury of the marma.

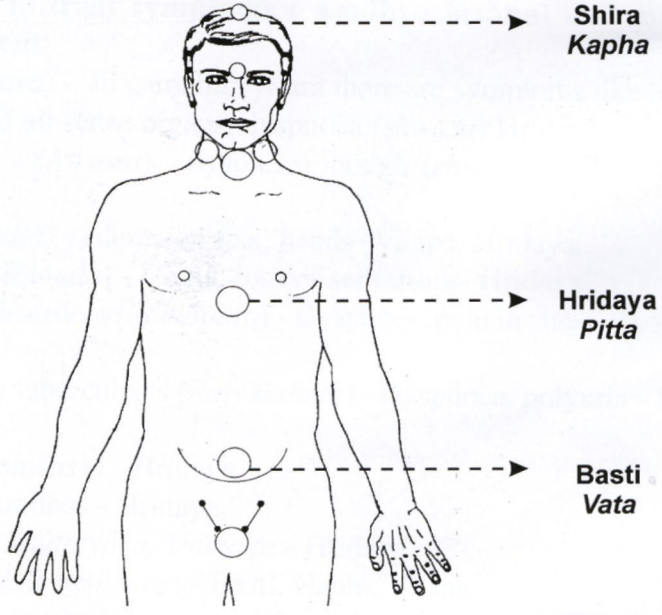
Chapter 10

Marma - Tridosha, Sub dosha and channels

1. Tridoshas and Three Main Marma Points

We have already seen that the three main marmas - shira, hridaya and basti are important sites in the body. Although all organs and structures are related with all doshas, it can be said that basti is related with Vata, hridaya is mainly related with Pitta and Shira is related with Kapha.

Tri - Dosha and Tri - Marmas

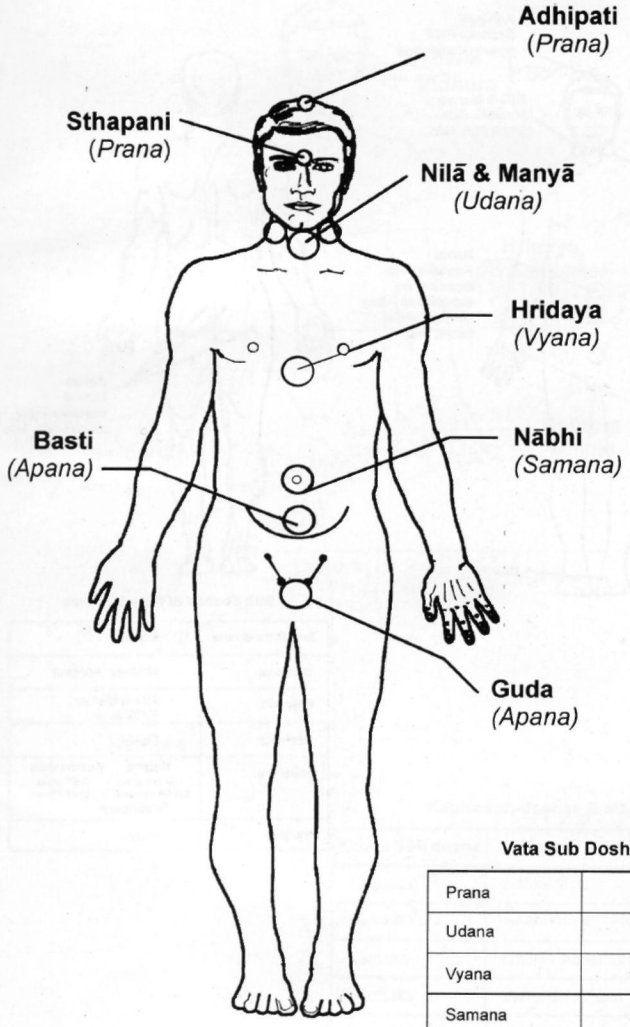


2. Marma and Sub doshas

Vata types and marma

1. Adhipati and sthapani marma are related with Prana and sahasrara chakra. It controls mind and CNS.
2. Nila and manya marma is related with Udana
3. Hridaya marma is related with Vyana
4. Nabhi marma is related with Samana
5. Basti marma is related with Apana

Sub Doshas of Vata & Marma



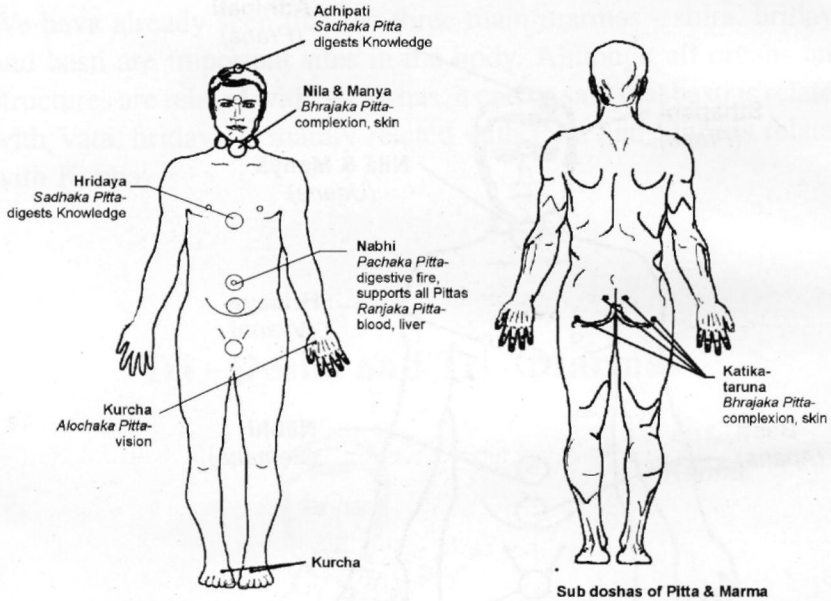
Vata Sub Doshas and Marma

Prana	Adhipati, Sthapani
Udana	Nila, Manya
Vyana	Hridaya
Samana	Nabhi
Apana	Basti, Guda

Pitta types and marma

1. Adhipati and Hridaya arma is related with Sadhaka and is responsible for digestion of knowledge
2. Nila, Manya and Katikataruna marma are related with Bhrajaka
3. Nabhi marma is related with Pachaka
4. and ranjaka Pitta as well as Liver.
5. Kurcha marma is related with Alochaka

Sub Doshas of Pitta & Marma



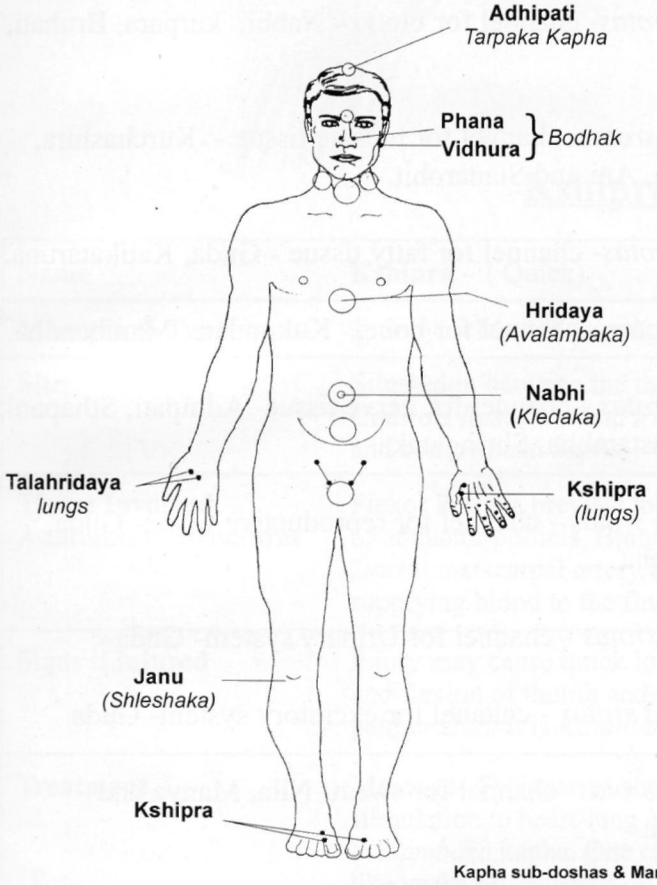
Sub doshas of Pitta & Marma

Sub Pitta dosha	Marma
Sadhaka	Hridaya, Adhipati
Bhrajaka	Nila & Manya Katik tarun
Pachaka	Nabhi
Alochaka	Kurcha, Kurchashira (Right great toe for spleen) (Left great toe for liver) Talahridaya
Ranjaka	Nabhi

Kapha types and marma

1. Adhipati marma is related with Tarpaka Kapha
2. Phana and Vidhura marma are related with Bodhaka
3. Hridaya and Talahridaya Marma are related with Avalambaka
4. Nabhi marma is related with Kledaka
5. Janu marma is related with Shleshaka Kapha.

Sub Dosha of Kapha & Marma

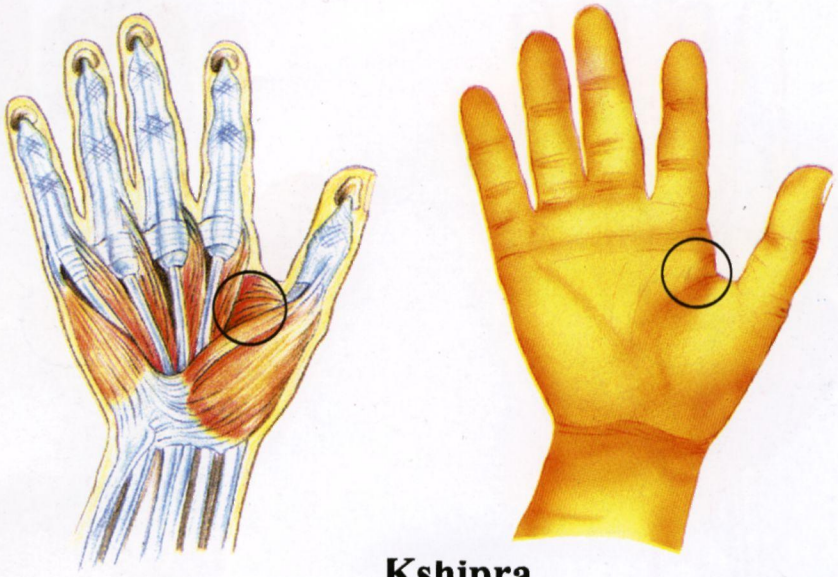


Kapha sub-doshas & Marma Points

Kapha Sub dosha	Marma	Comment
Tarpaka	Adhipati	Brain CNS
Avalambaka	Talahridaya / Hridaya	Heart - Lungs
Kledaka	Nabhi / Apasthambha	Related to digestion
Bodhaka	Vidhura / Phana	Related to smell
Shleshaka	Janu	Many synovial bursae

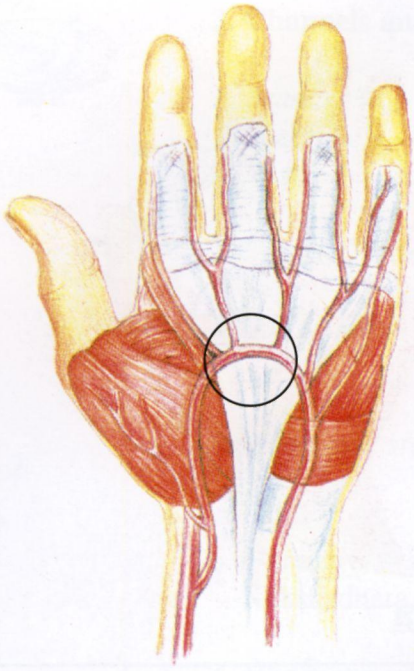
3. Channels and Marmas

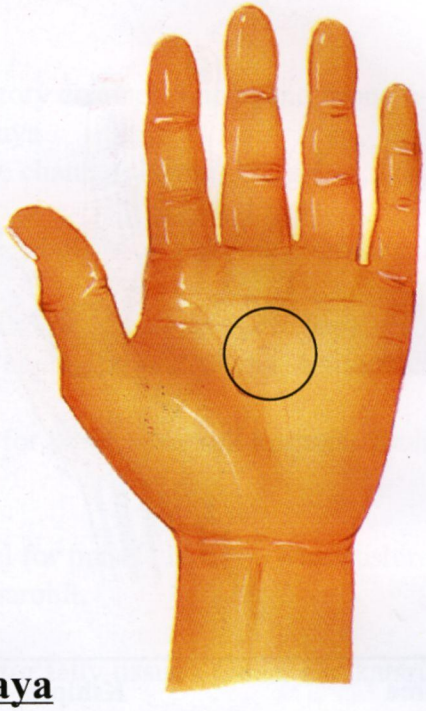
1. *Pranavaha srotas*- Respiratory channel- Lungs and bronchi- Talahridaya, Kshipra, Hridaya
2. *Annavaha srotas*- Digestive channel- Nabhi, Indrabasti,
3. *Udakavaha srotas*- Water metabolism channel- Apastambha, Urvi
4. *Rasavaha srotas* - Plasma and lymph channel- Hridaya, Kshipra, Stanamula, Lohitaksha, Amsaphalaka
5. *Raktavaha srotas*- channel for blood - Nabhi, kurpara, Bruhati, Janu
6. *Mamsavaha srotas*- channel for muscle tissue - Kurchashira, Kakshadhara, Ani and Stanarohit.
7. *Medovaha srotas*- channel for fatty tissue - Guda, Katikataruna,
8. *Asthivaha srotas* - channel for bones- Kukundara, Manibandha,
9. *Majjavaha srotas* - channel for nerve tissue- Adhipati, Sthapani, Apalapa, Apastambha, Shringataka
10. *Shukravaha srotas* - channel for reproductive tissue- Guda, Vitapa, Gulpha
11. *Mutravaha srotas* - channel for Urinary system- Guda
12. *Purishavaha srotas* - channel for excretory system- Guda
13. *Sweadvaha srotas*- channel for sweat- Nila, Manya and Katikataruna



Kshipra

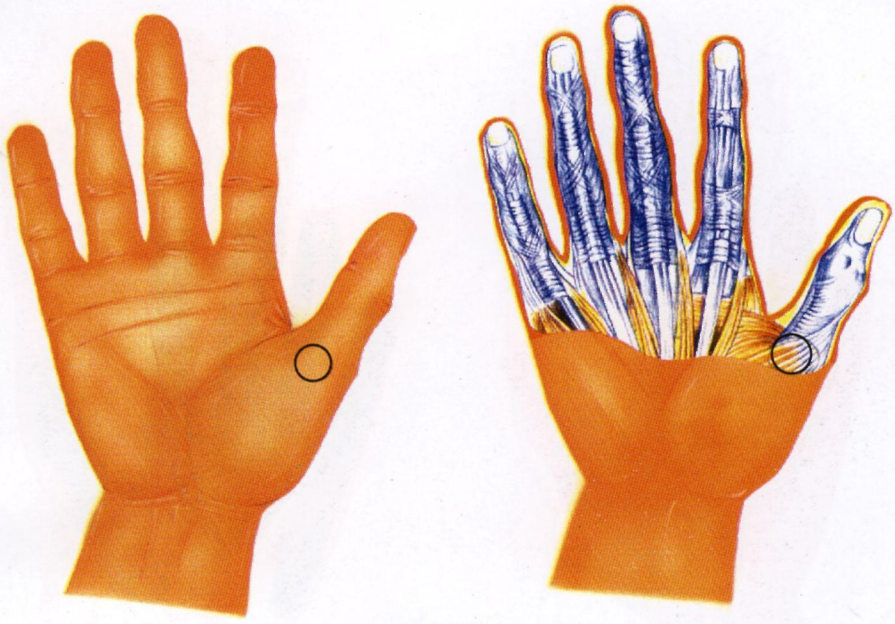
Name	**Kshipra -** (Quick)
Measure & Type	2, *Snayu* - M, 1/2 *anguli.*
Site	Situated in between the thumb and index finger. Controls *Rasavaha* and *Pranavaha srotas,* Heart and *avalambaka kapha,*
Tissue Involved Anatomical Structures	Flexor Pollicis brevis. Oblique and transverse head of adductor pollicis, Branches of Median Nerve, Dorsal metacarpal artery and superficial palmer arch supplying blood to the fingers.
Signs if injured	Injury may cause quick loss of function of adduction and flexion of thumb and severe bleeding from the palmer arch. It is *Kalantara Pranahara* type marma.
Treatment	**Massage-** This marma should be massaged for giving stimulation to heart-lung apperatus as well as for controlling *avalambaka* kapha. One can use powder of vacha, heavy oils like vacha oil, mustard oil, and amruta oil (Tinospora cordifolia), or aromatic oils like davana (artemesia pallens), casia (cinnamoum cassia), sage (salvia officinalis). ***Suchi-vedha-*** (acupuncture)- If the person is suffering from tingling and numbness, paranochia, erysepelas, gout, calcenial spur, psoriasis, cracked feet; then acupuncture should be done 2 anguli proximal to the marma site.





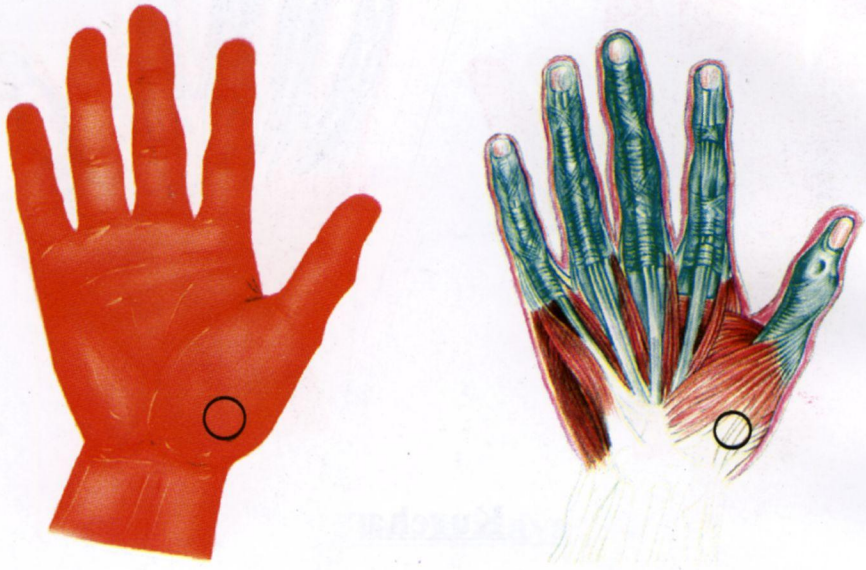
Talahridaya

Name	**Tala-Hridaya -** (Heart of the palm)
Measure & Type	2, *Mamsa* T, Ap; 1/2 *anguli.*
Site	Situated in the center of the palm, facing the root of the middle finger. Controls *Pranavaha srotas*, Heart and Lungs, respiration and *Avalambaka Kapha.*
Tissue Involved Anatomical Structures	Tendon of Flexor digitorum profundus, Lumbricalis and Extensor digitorum. *Mamsa dhatu* of Tunica media of Superficial and Deep Palmer arch. Interossei muscle. Branches of Median nerve.
Signs if injured	Injury may cause loss of functions of flexion and extension of 2 nd, 3 rd, and 4 th fingers and adduction of 2 nd, 3 rd and 4 th metacarpals. Severe bleeding may lead to severe pain, shock or gangrene of the fingers. It is type of *Kalantara Pranahara* marma.
Treatment	**Massage -** for controlling *Pranavaha srotas*, massage with narayan oil or aromatic oils derived from elecampane (inula graveolens), galbanum and (ferula species) is effective.



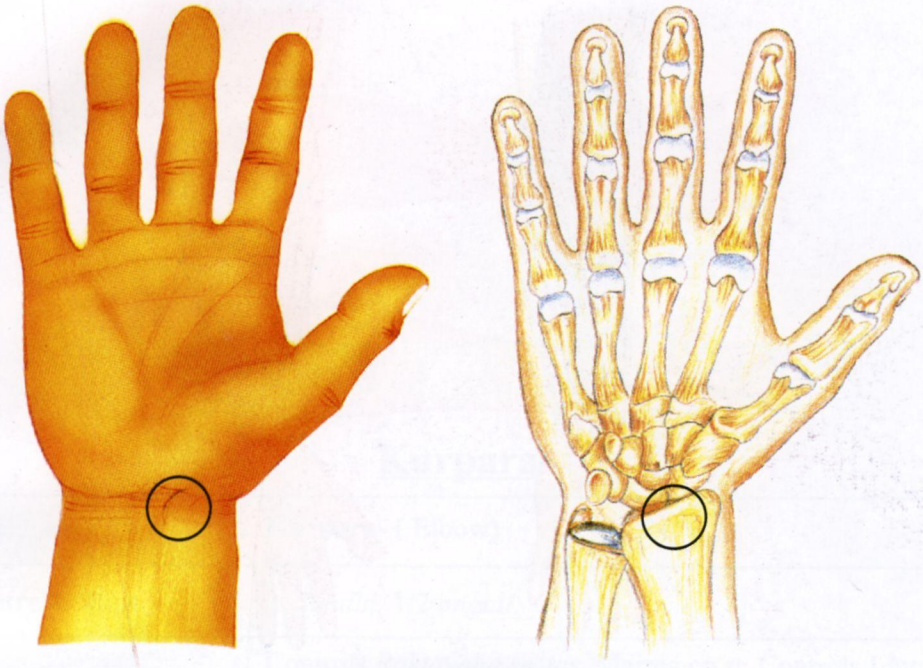
Kurcha

Name	**Kurcha -** (A knot or bundle of the muscles at the base of the thumb)
Measure & Type	2, *Snayu*, 4 *anguli.*
Site	Situated 1 inch distal from the wrist joint at the root of the thumb, above kshipra marma. Controls *Alochaka Pitta.*
Tissue Involved **Anatomical Structures**	Tendon of Extensor digitorum, Extensor indicis, Tendon of Extensor carpi radialis bravis and longus and Flexor digitorum sublimus and profundus. Branches of Median nerve.
Signs if injured	Injury may cause incoordination among the carpal and metacarpal joints, Impairment of the functions of extension and abduction of the wrist and may cause disfigurement of the hand. It is *Vaikalyakara* type marma.
Treatment	**Massage -** for controlling Alochaka Pitta massage with sandalwood oil, or shatadhauta ghrita - ghee washed in water for 100 times and aromatic oils like rose and lotus (nelumbo nucifera) are useful.



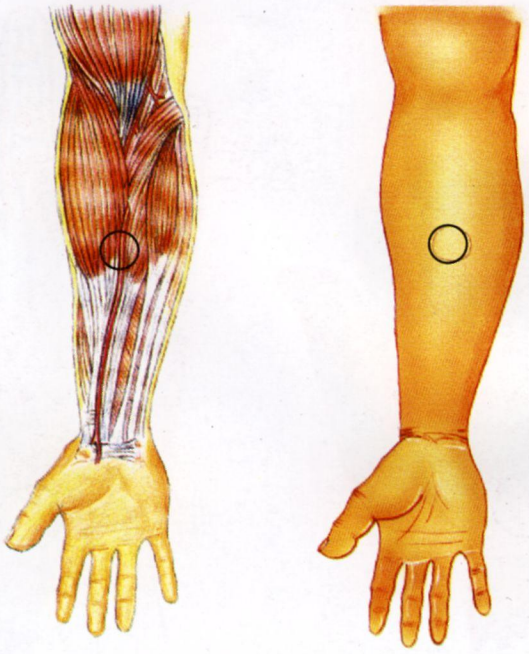
Kurcha-Shira

Name	**Kurcha-Shira-** (Head of the kurcha)
Measure & Type	2, *Snayu*, 1 *anguli.*
Site	Below manibandha, Situated 2 *anguli* above kurcha or between kurcha and manibandha. Controls *Alochaka* Pitta
Tissue Involved Anatomical Structures	Tendon of flexor carpi radialis, Tendon of Abductor pollicis longus. Tenon of Extensor Carpi radialis longus. Tendon of Extensor pollicis longus and bravis (Above 3 tendons form snuff box).
Signs if injured	Injury may cause impairment of the function of the flexion and abduction of the wrist as well as severe bleeding from the Radial artery and severe pain due to injury to the Radial nerve. It is *Rujakara* type marma.
Treatment	**Massage -** For controlling *alochaka* Pitta, use of amalaki oil, brahmi oil, and cajeput (melaleuca leuadendron) is good.



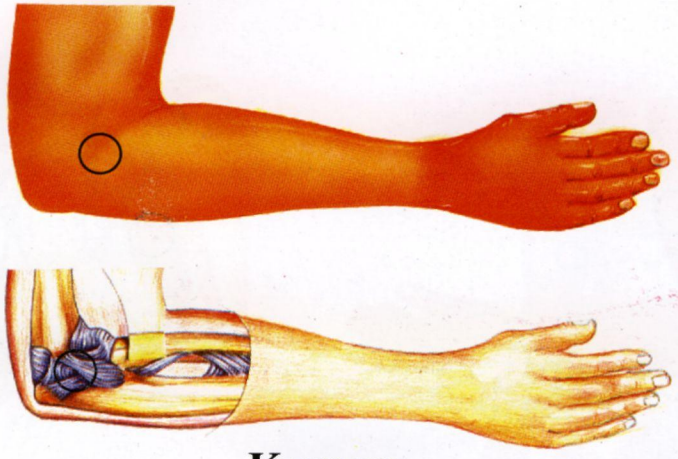
Manibandha

Name	**Manibandha -** (Bracelet)
Measure & Type	2 *Sandhi* - Jt.; 2 *anguli.*
Site	1/2 inch lateral to the centre of the wrist joint. Controls *Asthivaha srotas.*
Tissue Involved Anatomical Structures	Wrist joint. Radio-ulnar and radio-carpal ligaments Radial and Median nerve and artery.
Signs if injured	Injury may cause the loss of function of flexion, extension, adduction and abduction of the hand. It can cause incoordination, dislocation and disfigurement of the hand. It may cuase wasting of the hand also. It is *Vaikalyakara* type marma.
Treatment	**Massage -** for controlling *asthivaha srotas*, use of sahachara oil, birch (betula lenulata) or oil of wintergreen (gaultheria procumbens) is beneficial. ***Suchi-vedha-*** (acupuncture) - In case of acute cervical lymphadenitis, acupuncture should be done 2 *anguli* distal to the marma.



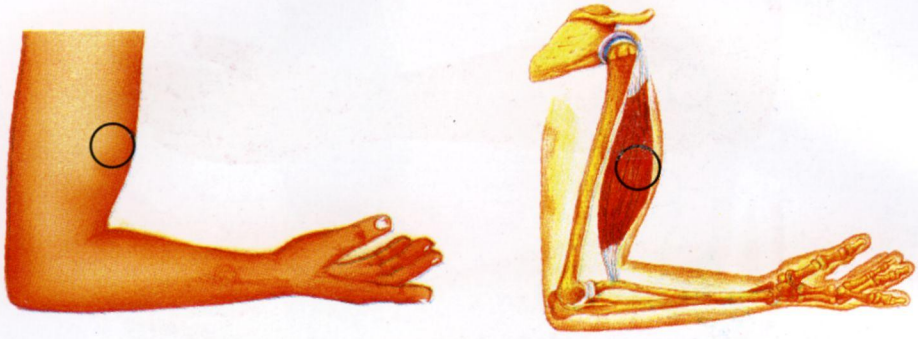
Indra basti

Name	**Indra basti-** ('Indra's bladder'- mid fore arm)
Measure & Type	2, *Mamsa,* 1/2 *anguli.*
Site	Center of the forearm, slightly at the lateral aspect where the Radial artery passes. Controls *Annavaha, Agni* and small intestine.
Tissue Involved Anatomical Structures	Flexor pollicis longus, Extensor Carpi radialis, Brachioradialis and Pronator teres muscles. Radial and Median nerve, Radial artery and Tributaries of Cephalic vein.
Signs if injured	Injury may lead to disfigurement of the shape of the hand leading to 'Volkman's contracture'. It may lead to paralysis of the forearm and severe bleeding. It is *Vaikalyakara* type of marma. (The important structure at this marma is Radial artery and not any important snayu.)
Treatment	**Massage -** For stimulation of agni use of mahamasha oil is good. For controlling small intestine and annavaha srotas, use of aromatic oils of anise (pimpinella anisum), trifolia (red clover) or cardamon (ellateria cardamomum) are suggested.



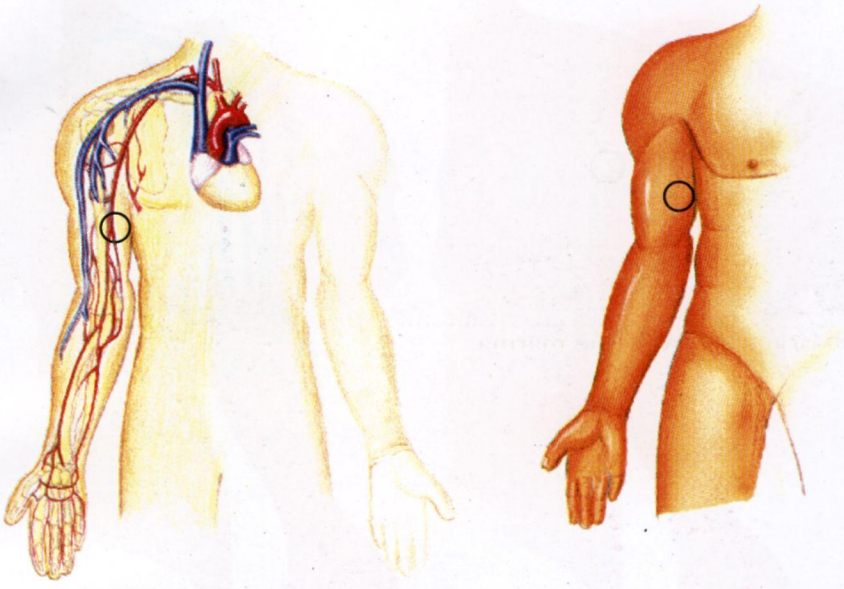
Kurpara

Name	**Kurpara-** (Elbow)
Measure & Type	2, *Sandhi,* 1/2 *anguli.*
Site	Controls *Raktavaha srotas*. Marma on rt. Controls Liver, Marma on Lt. Controls spleen.
Tissue Involved Anatomical Structures	Elbow joint - Ligament capsule, Ulnar, Radial and Annular radial collateral ligament, Median nerve and its branches. Brachial artery, Tributaries of Cephalic and Median cubital vein. Supinator, Extensor carpi radialis, Biceps, Triceps and Pronator teres muscles.
Signs if injured	Injury will cause severe haemorrhage and impairment of function of forearm. It is *Vaikalyakara* type marma.
Treatment	***Agnikarma*** **-**For enlargement of liver, select sensitive point on right marma and apply heat with gold or silver probe. For spleenomegaly it should be done on the left marma point. The heat given should be mild. The procedure can be repeated every alternate day for 7 times. ***Sira-vedha*** (blood letting)- For liver disorders, blood letting should be done from the right cubital vein and for spleen disorders it should be done from the left cubital vein. ***Suchi-karma*** **-** (Acupuncture)- For treating diseases of liver, use the sensitive point between ring finger and little finger on the right hand and for treating diseases use the same point on the left hand. For branchial neuralgia, cervical spondylitis, tingling and numbness of the palm, acupuncture should be done 4 anguli proximal or distal to the kurpara marma. **Massage-** For liver diseases massage should be done on the right kurpara marma. Use padmakadi oil or manjisthadi oil or aromatic oils like rosemary (rosemarinus officinalis). For diseases of spleen left kurpara marma should be massaged with oil of ginger (zingiber officinalis).



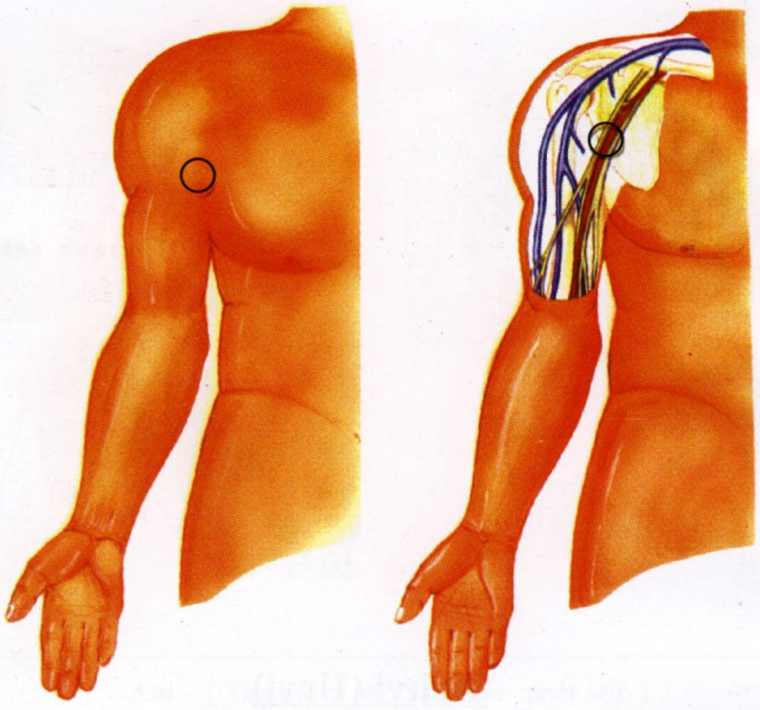
Ani

Name	**Ani -** (The lower region of the upper arm)
Measure & Type	2, *Snayu*, 1/2 *anguli.*
Site	In the medial aspect of the arm, 2 inches above the medial epicondyle of the Humerus. Controls *Udakavaha srotas.*
Tissue Involved **Anatomical Structures**	Biceps, Coracobrachialis muscles. Ulnar and Median nerve. Lower end of the Humerus. Brachial artery and vein.
Signs if injured	Injury to this marma will cause impairment of the function of extension of forearm, drawing of the forearm forward and inward and injury to the nerve may cause complete paralysis of the forearm. Injury to the artery may also cause severe bleeding. It is *Vaikalyakara* type marma.
Treatment	**Massage-** For controlling *udakavaha srotas* use *amalaki* oil (emblica officinalis).



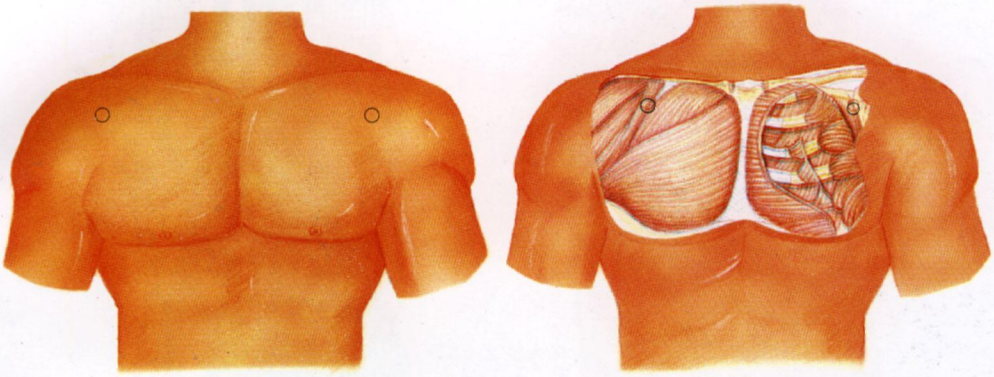
Bahvi (Urvi)

Name	**Bahvi (Urvi)-** (The wide region of the forearm)
Measure & Type	2, *Sira* A,V; 1 *anguli.*
Site	In the Radial aspect of the arm about 4 and 1/2 inches from the medial epicondyle. Controls *Rasavaha* and *Udakavaha* and healthy tissue growth.
Tissue Involved Anatomical Structures	Brachial artery and vein, Lymph drainage to axillary group of glands. Median and Ulnar nerve. Biceps and Triceps muscles.
Signs if injured	Damage to the artery may cause bleeding. Injury may cause impairment of the function of flexion and extension of the forearm. It is *Vaikalyakara* type of marma.
Treatment	**Massage -** For controlling rasavaha or lymphatic system, use oil of camphor (cinnamomum camphora), for improving circulation, use oil of thyme (thymus vulgaria).



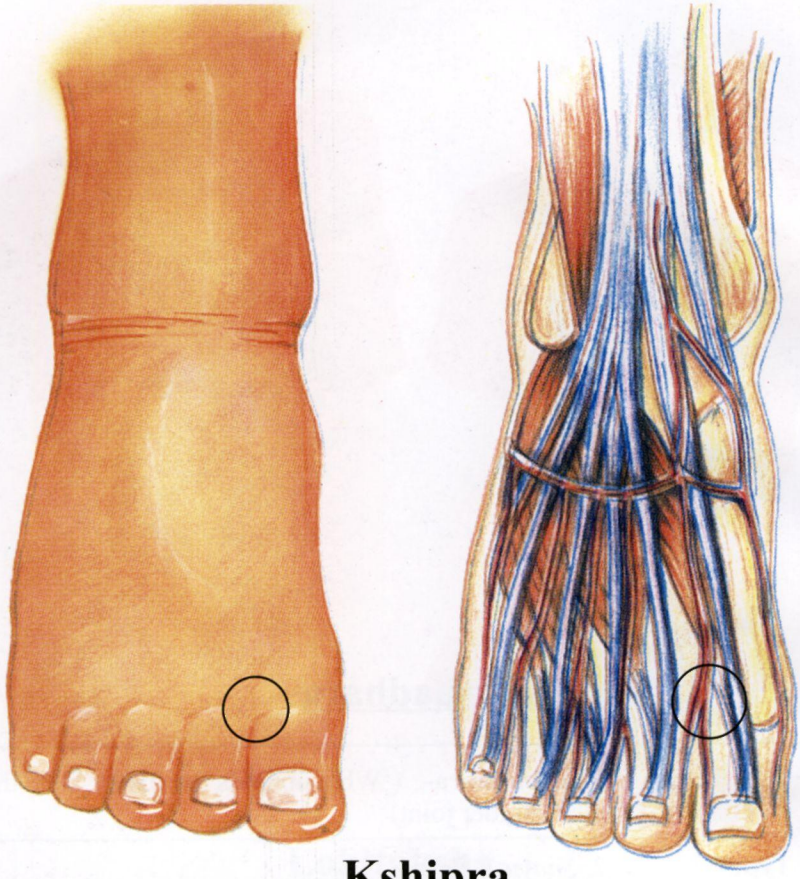
Lohitaksha

Name	**Lohitaksha-** ('Red eyed' the lower frontal insert of the shoulder joint)
Measure & Type	2, *Sira*, 1/2 *anguli*
Site	Center of the armpit or axillary fossa through which axillary artery passes. Controls *Rasavaha*
Tissue Involved Anatomical Structures	Axillary artery and vein. Lymph vessel drainage to axillary group of glands. Median and Ulnar nerve. Latissimus dorsi, Pectoralis major and minor, Coraco Brachialis and Subscapularis muscles.
Signs if injured	Damage to the axillary vessels can cause haemorrhage. Injury to the muscles may cause loss of function of the Humerus. It is *Vaikalyakara* Marma.
Treatment	**Massage -** For controlling *rasavaha* or lymphatics, bilvadi oil (egle marmelos) or aromatic oil of geranium (pelargonium ordorantissium) is useful.



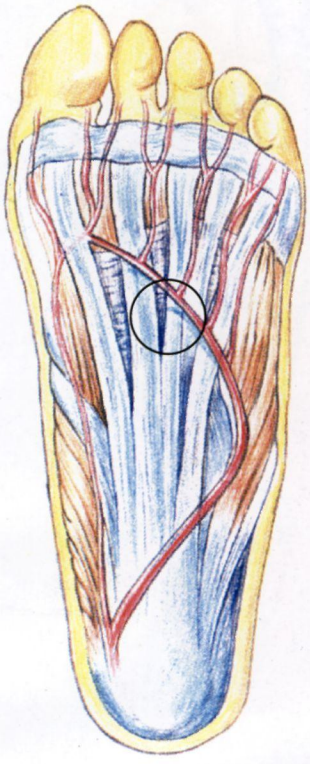
Kakshadhara

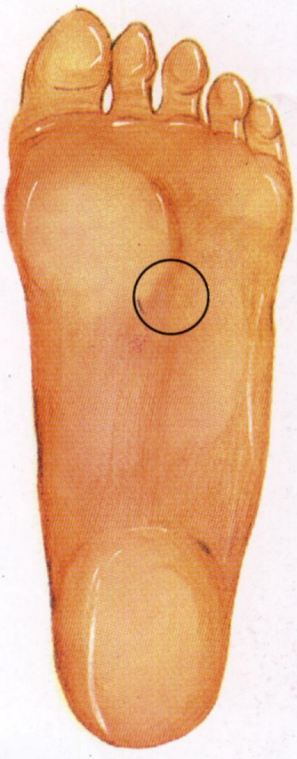
Name	**Kakshadhara-** ('What upholds the flanks' near the top of the shoulder joint)
Measure & Type	2, *Snayu*, 1 *anguli.*
Site	2 inches below the point joining the lateral 1/3 and medial 2/3 of clavicle, where the Median nerve is situated. Controls *Mamsavaha*
Tissue Involved Anatomical Structures	Pectoralis Major and minor as well as intercostal muscles. Median nerve. Lymph drainage to axillary glands. Axillary artery and vein.
Signs if injured	Injury may cause impairment of the functions - downward and forward drawing of the arm, depression of the shoulder joint. Nerve injury may lead to complete paralysis of the hand, waisting of the muscles or gangrene. It is *Vaikalyakara* type of marma.
Treatment	**Massage -** For controlling *mamsavaha srotas*, use sesame oil, *mahamasha* oil or *chandan-bala-lakshadi* oil or aromatic oil of marjoram (origanum majorana). Use of *kuzambu* containing 4 parts of sesame oil, 2 parts of ghee and 1 part of castor oil also proves very effective.



Kshipra

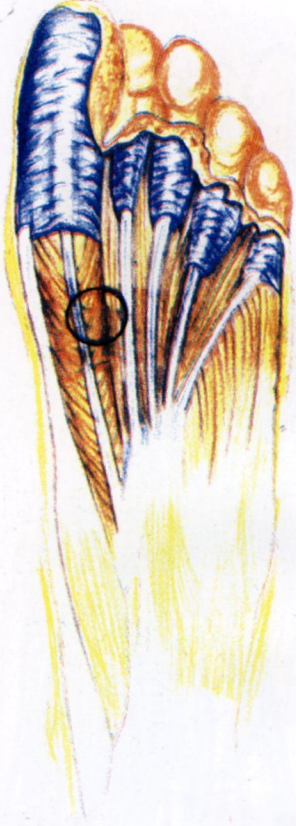
Name	**Kshipra -** ('Quick'- due to its immediat effect)
Measure & Type	2, *Snayu*, 1/2 *anguli.*
Site	In between the big toe and the first toe. Controls *Rasavaha, Pranavaha, Avalambaka* and heart.
Tissue Involved **Anatomical Structures**	Adductor Hallucis Bravis, Lumbricalis muscles. Posterior tibial nerve. Dorsal metatarsal artery, Plantar arch and Medial Plantar artery. Metatarso-phalangeal joint.
Signs if injured	Injury may cause impairment of the function of the adduction and flexion of the great toe. Damage to the artery may cause severe bleeding, haematoma inside the Planter apponeurosis and septic toximia. It is *Kalantara Pranahara* type marma.
Treatment	**Massage-** Use maha narayan oil, which is fortified formula of narayan oil or aromatic oil of orange (citrus aurantium), is good.





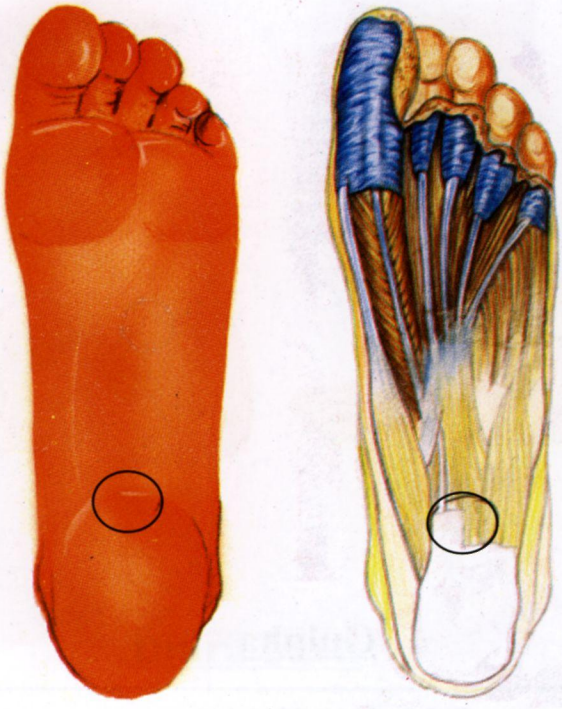
Tala-Hridaya

Name	**Tala-Hridaya -** (Heart of the sole)
Measure & Type	2 *Mamsa,* 1/2 *anguli.*
Site	Center of the sole facing the root of the third toe, where Planter artery moves round to form the Planter arch. Controls *Pranavaha srotas.*
Tissue Involved Anatomical Structures	Flexor digitorum bravis and longus muscles. Adductor Hallucis, Flexor digitorum accessors muscles. *Mamsa dhatu* of tunica media of Planter arch. Planter arch artery and Tributaries of Cephanous vein.
Signs if injured	Injury may cause impairment of the function of flexion and extension of phalanges and adduction of the great toe. Severe bleeding may occur due to injury to Planter arch. It is *Kalantar Pranahara* type marma.
Treatment	**Massage** -use bala oil or aromatic oil of cedarwood (juniperus virginiana) or himalayan cedarwood (cedrus deodar).



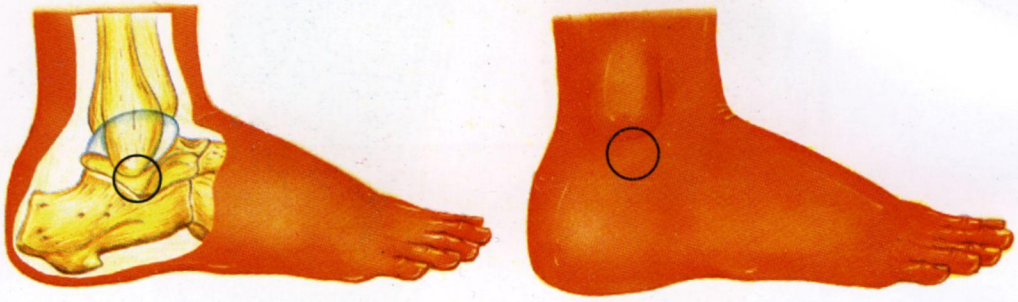
Kurcha

Name	**Kurcha -** (A knot - bundle of the muscles or tendons.)
Measure & Type	2, *Snayu,* 4 *anguli.*
Site	2 inch proximal and 1/2 inch medial to the centre of the sole of the foot. Controls *Alochaka* and eye sight
Tissue Involved Anatomical Structures	Tendon of Flexor hallucis longus, Abductor hallucis muscle. Medial planter nerve. Medial Planter and Dorsal Metatarsal and Arcuate arteries.
Signs if injured	Injury may cause damage to the bones and ligaments resulting in incoordination of the action of the muscles and the shape of the foot may get disfigured. It is *Vaikalyakara* type marma.
Treatment	**Massage -**For controlling *alochaka pitta*, use triphala ghee or castor oil (Ricinus comunus), or lemongrass (Cymbopogon citratus).



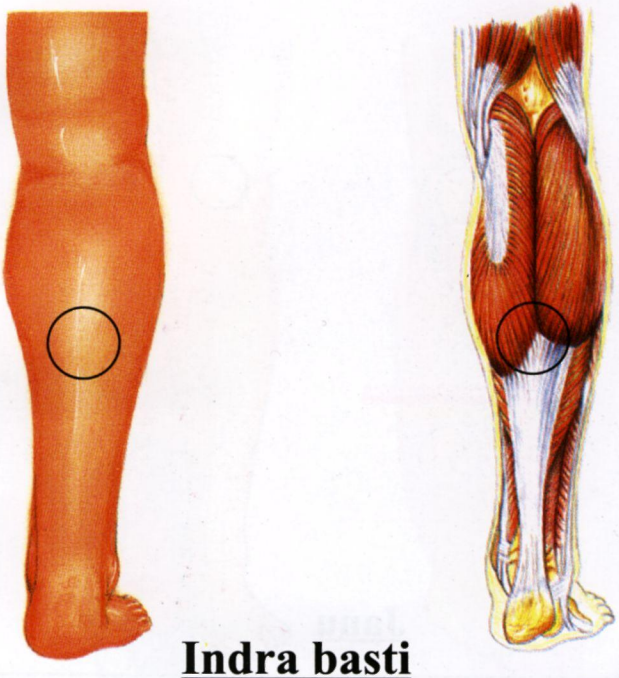
Kurcha - Shira

Name	**Kurcha-Shira** - (Head of the kurcha)
Measure & Type	2, *Snayu,* 1 *anguli.*
Site	Lateral side of the gulpha - ankle joint. Controls *Mamsavaha srotas.*
Tissue Involved **Anatomical Structures**	Peroneous bravis and Longus muscles. Peroneal artery and tributaries of short Cephaneous vein. Peroneal nerve.
Signs if injured	Damage to the ligaments and bone may cause severe pain alongwith the impairment of all the functions of the foot. It is *Vaikalyakara* type of marma.
Treatment	***Agnikarma-*** For vatakantaka (calcenial spur) it should be done on the sensitive point with iron probe. **Massage-**Use doorvadi oil (cyndon dactylon), ushiradi oil (vetevera zyzanoides) or aromatic oil of elemi (canarium luzonicum).



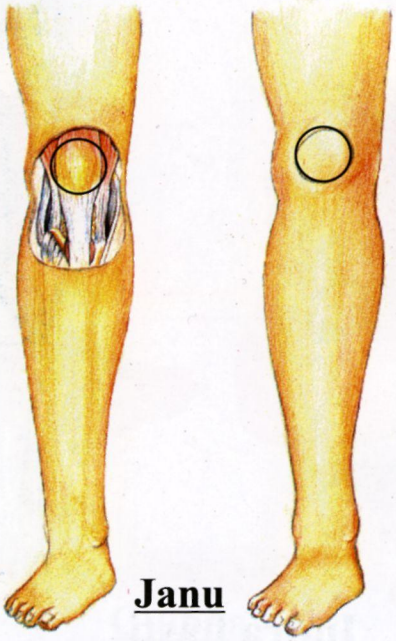
Gulpha

Name	**Gulpha-** (Ankle joint)
Measure & Type	2, *Sandhi,* 2 *anguli.*
Site	Ankle joint and the tibia as well as calcenium bone. Controls *Medovaha, Asthivaha*, and *Shukravaha srotas.*
Tissue Involved Anatomical Structures	Flexor hallucis longus and bravis, Tibilias posterior and Flex or digiti longus muscles. Posterior Tibial nerve. Posterior Tibial artery and vein.
Signs if injured	Injury to the joint will cause swelling with impariment of the functions of flexion, extension etc. It is *Vaikalyakara* type of marma.
Treatment	***Suchi-karma-*** (acupuncture) - For tubercular knee, severe pain in the groin, paresis of the leg, paralysis of the leg, it should be done 4 anguli above the marma. **Massage -**For controlling *asthivaha srotas,* use ashwagandha oil, triphaladi sahasrayoga or aromatic oils like clarysage (salvia sclarea) for females and nutmeg (myristica fragrans) for males.



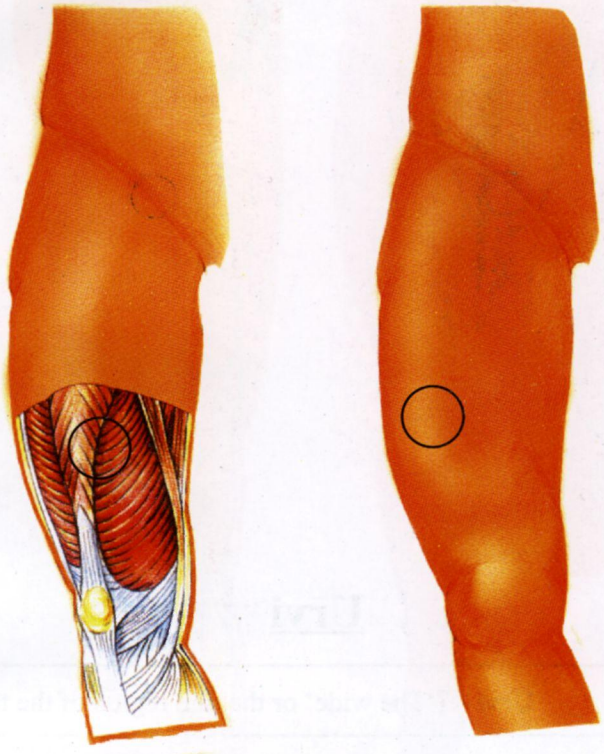
Indra basti

Name	**Indra basti-** ('Indra's bladder' -mid calf region)
Measure & Type	2, *Mamsa,* 1/2 *anguli.*
Site	The point at the middle of the line, joining the posterior surface of the calceneum with the centre of the popliteal fossa. Controls *Agni*, small intestine and *Annvaha srotas.*
Tissue Involved Anatomical Structures	Gastro-cnemius, Soleus and Plantaris muscles. Peroneal (branch of posterior tibial) and Posterior Tibial artery and vein. Drainage of lymph to the Popletial lymph glands. Post. Tibial nerve.
Signs if injured	Injury may cause impairment of the functions of the foot. If the artery is damaged, there will be severe bleeding, shock and collapse. It is *Kalantara Pranahara* type of marma. (At this vital point, Post. Tibial artery is more important than any other muscle or ligament).
Treatment	**Massage -** For stimulation of *agni*, use kshara oil, hingu-trigunadi oil containing garlic, asafetida and rock salt. For improving the function of small intestines and *annavaha srotas* massage with aromatic oils of fennel (foeniculum vulgare), dill (anethum graveolens) or ajwan (apium graveolens) are recommended.



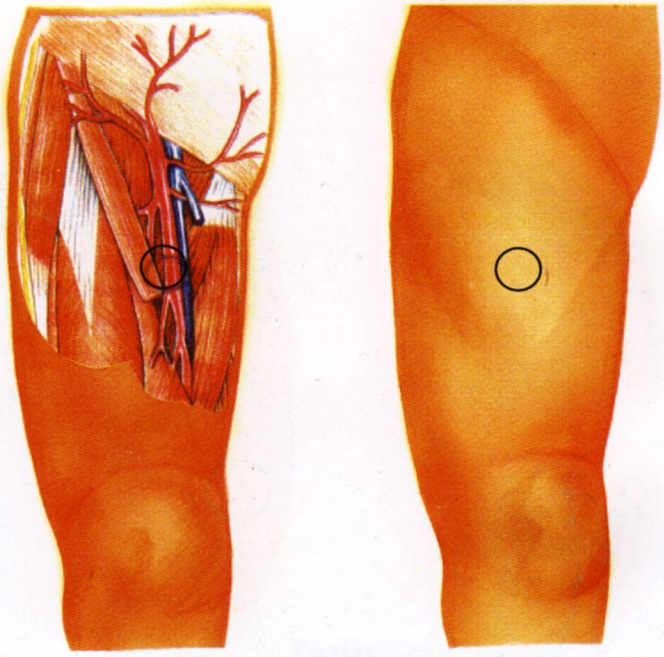
Janu

Name	**Janu-** (Knee)
Measure & Type	2, *Sandhi,* 3 *anguli.*
Site	On the Knee Joint. Right marma Controls Liver, Left marma Controls Spleen.
Tissue Involved **Anatomical Structures**	Knee joint. Posterior Cruciate Ligament, Oblique Post. Ligament. Plantaris and Gastro-cnemis muscles. Poplirteal artery and vein. Femur, Tibia and Patella bones. Medial Popliteal nerve.
Signs if injured	Injury to the knee can cause severe pain, edema, difficulty in walking, disfigurement and impairment of all the functions of the joint. It is *Vaikalyakara* type of marma.
Treatment	***Agnikarma*** **-** In sciatica, as usual select sensitive point 4 anguli proximal or distal to the marma and apply heated gold probe, at that point. ***Lepa*** (application of paste)- For treating painful knee joint, apply oil of bhallataka (semicarpus anacardium) on the very painful point. (Take care that this oil does not spread other than painful point) **Massage-** For improving function of liver massage on the right marma with nalapamaradi oil or aromatic oil of lime (citrus aurantifolia), and for improving spleen massage on the left marma with bhringamalakadi oil or aromatic oil of tangerine (citrus mandurensis).



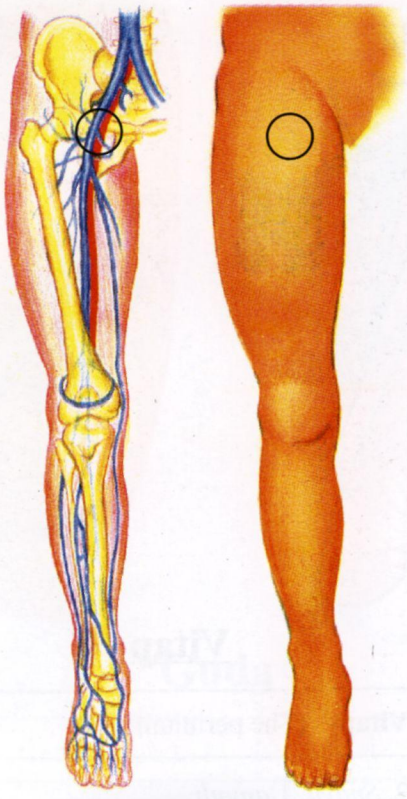
Ani

Name	**Ani** - (The lower region of the upper leg)
Measure & Type	2, *Snayu,* 1/2 *anguli.*
Site	2 inches above the centre of the knee joint and popliteal fossa. Controls *Udakavaha srotas.*
Tissue Involved Anatomical Structures	Medial and lateral ligaments of the knee joint. Qudriceps Femoris, Adductor magnus muscles. Femoral artery, Tributories of Femoral vein and Cephanus nerve.
Signs if injured	Injury will cause severe pain and loss of functions of knee. It is *Vaikalyakara* type of marma.
Treatment	**Massage-** For contolling *udakavaha srotas,* massage with panchamla oil or amalaki oil (emblica officinalis) is advised.



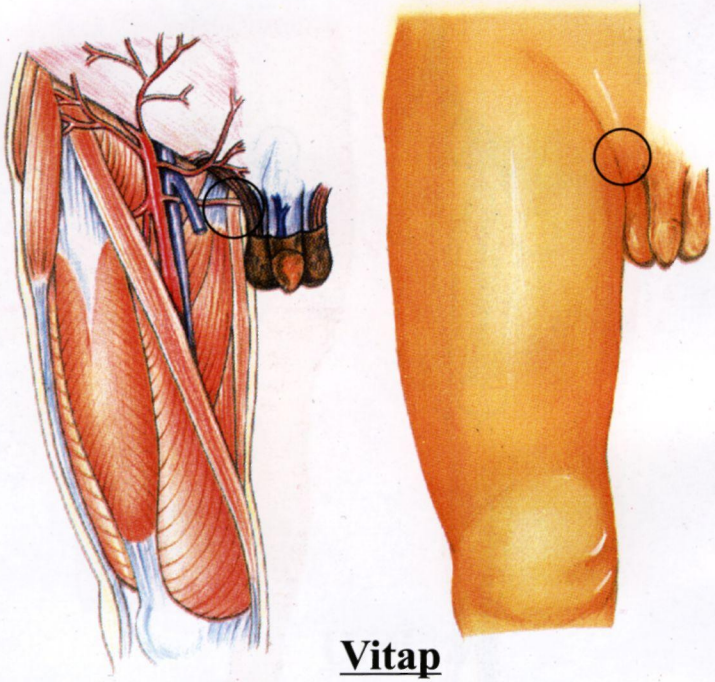
Urvi

Name	**Urvi -** ('The wide' or the mid region of the thigh)
Measure & Type	2, *Sira,* 1 *anguli.*
Site	In the middle of the line joining the centre of the Inguinal Ligament and the medial condyle of the Femur where the Femoral artery, Long Cephanus vein passes. Controls Rasavaha and *Udakavaha srotas.*
Tissue Involved Anatomical Structures	Femoral artery and vein. Drainage to the superficial inguinal glands. Cephaneous nerve. Adductor Magnus and Rectus Femorus muscles.
Signs if injured	Injury to all the important structures passing through this vital point - artery, nerve and vein can cause wasting, disfunction of the muscles and bleeding. It is *Kalantara Pranahara* type of marma.
Treatment	**Massage-** This controlls both *rasavaha srotas* and *udakavaha srotas.* For improving functions of rasavaha it is advisable to massage with jeerakadi oil containing cumin, almond oil or aromatic oil of pine (pinus alba).



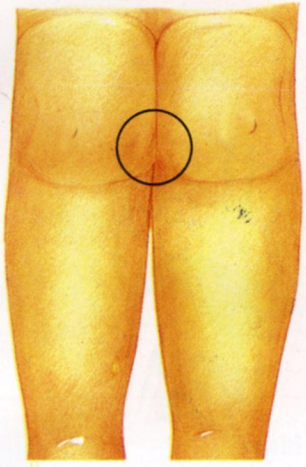
Lohitaksha

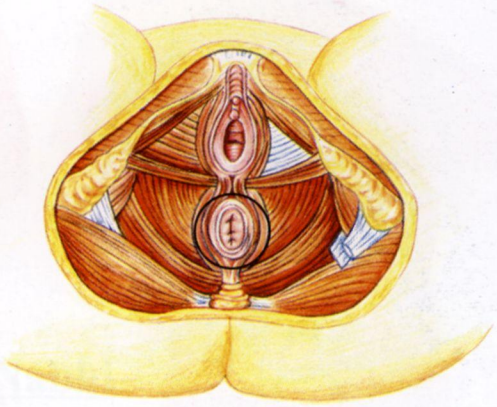
Name	**Lohitaksha-** ('The red eyed' -lower frontal region of the leg joint)
Measure & Type	2, *Sira,* 1/2 *anguli.*
Site	Two inches lateral to the Symphysis Pubis where Femoral artery passes. In Femoral Triangle. Controls *Rasavaha srotas.*
Tissue Involved **Anatomical Structures**	Femoral artery and Tributories of Femoral vein. Femoral nerve. Drainage to the superficial Inguinal glands. Psoas Major and Pectineus muscles.
Signs if injured	Injury can can cause Paralysis of the lower limb and the edema of the leg along with deformity and severe pain also. It is *Vaikalyakara* type of marma.
Treatment	***Suchi-Karma-*** (acupuncture) -For treating galaganda (thyroid hypertrophy) select a point 1 *anguli* medial to the marma. **Massage -** For controlling rasavaha and its diseases, use karpuradi oil, tulasipatradi oil (basilicum). The use of aromatic oil of jasmine (jasminum grandiflorum) is also beneficial.



Vitap

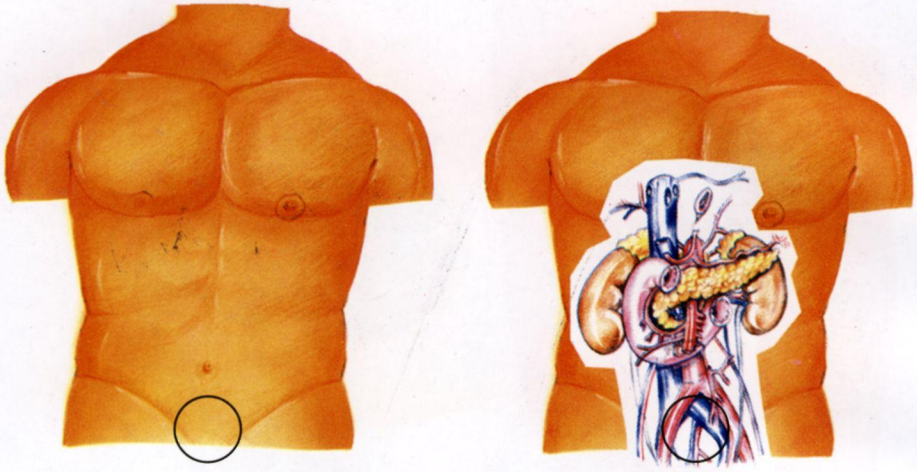
Name	**Vitap-** (The perinium)
Measure & Type	2, *Snayu*, 1 *anguli.*
Site	One inch lateral to the Syphysis Pubis in the Superficial ring thorugh which the Spermatic cord passes. Controls *Shukravaha srotas.*
Tissue Involved **Anatomical Structures**	**In men -** Obliqus Externus and Internus. Rectus abdominis muscles. Femoral nerve and Spermatic cord. **In women -** Round ligament. Labia majora and labia minora. (Ligament is not important here.) Injury can cause impotency.
Treatment	***Suchi-karma*** (acupuncture)- For treating paraphymosis, infections in genital tract and oligospermia; select a point 2 anguli medial to marma. For treating hydrocele select a point posterior to the scrotum. **Massage -** For controlling *shukravaha srotas,* it is advisable to massage with mashataila, kumkumadi oil, or oil of musk (floral hibiscus).





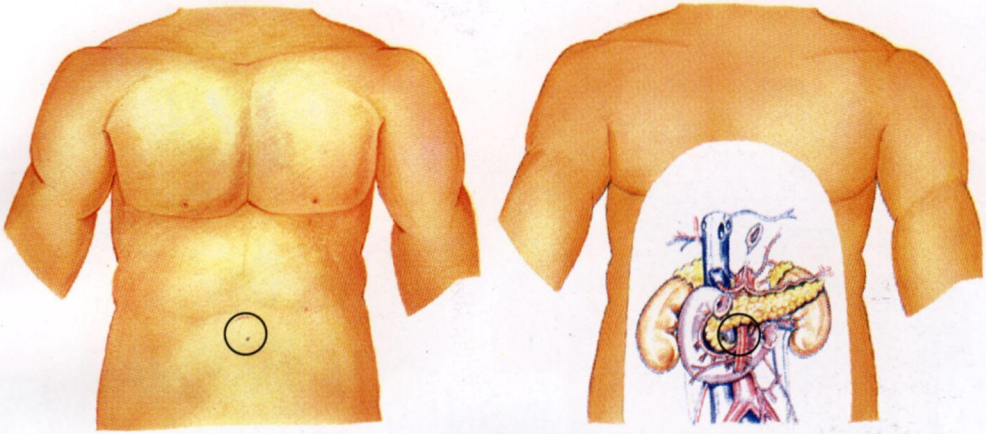
Guda

Name	**Guda-** (Anus)
Measure & Type	1, *Mamsa,* 4 *anguli.*
Site	Controls 1 st chakra- *Muladhara* and channels of Urinary, Reproduction, Menstrual as well as Testes and ovaries.
Tissue Involved Anatomical Structures	Sphinctor Ani Internus and Externus, Corrugator Cutis Ani muscles. Rectal plexus of nerve. Inferior rectal artery and vein.
Signs if injured	Injury to the sphinctor muscles will cause in loss of control of the action of Anus. Similarly sudden dilatation will cause reflex stoppage of heart. Hence it is *Sadyha Pranahara* type of marma.
Treatment	**Massage -** For improving functions of *mutravaha srotas* (urinary system) use- birch (betula lenulata). For improving emmenagouge function, use saffron (crocus sativus) or oil of myrrrh. For increasing sexual function, use musk or honeysuckle. It is also advisable to use agaru oil (aquillaria agallocha) as rejuvenative massage in men. For controlling obesity, use *Asana-bilwadi* oil for massage.



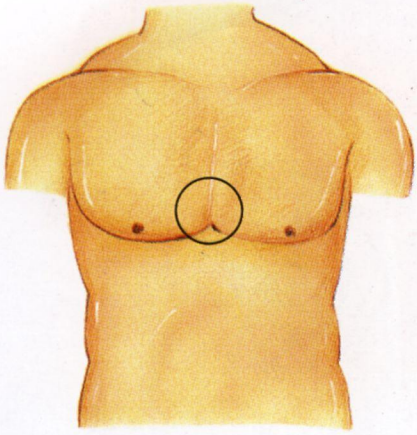
Basti

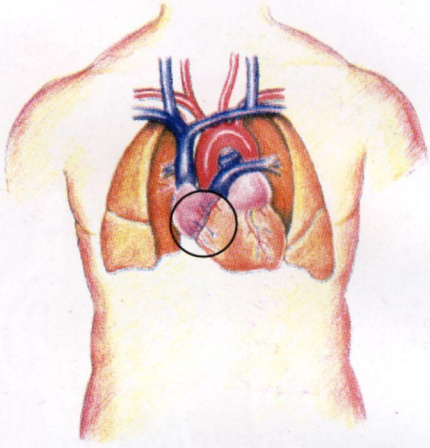
Name	**Basti -** (Bladder)
Measure & Type	1, *Snayu,* 4 *anguli.*
Site	Above and behind Symphisis Pubis. In between Pubic Symphisis and Umbilicus. Controls *Mamsavaha srotas* and *Apana* Vata.
Tissue Involved Anatomical Structures	Rectus abdominus, Obliqus externus muscles. Superior and Inferior Pubic ligaments. Hypogastric, External and Internal Iliac artery. Hypogastric plexus and Pelvic Splanchnic nerves. Pubic bone. Drainage to the Medial sacral, Internal Iliac and External Iliac lymph glands.
Signs if injured	Injury will cause extra-vasation of urine, which can cause peritonitis, uraemia and death. Hence its grouping under *Vaikalyakara* is not justified. It should have been under *Sadyha Pranahara* type.
Treatment	**Massage-** For controlling Vata, use dashamuladi oil, sesame oil, narayan oil or aromatic oil of yarrow (archillea millefolium).



Nabhi

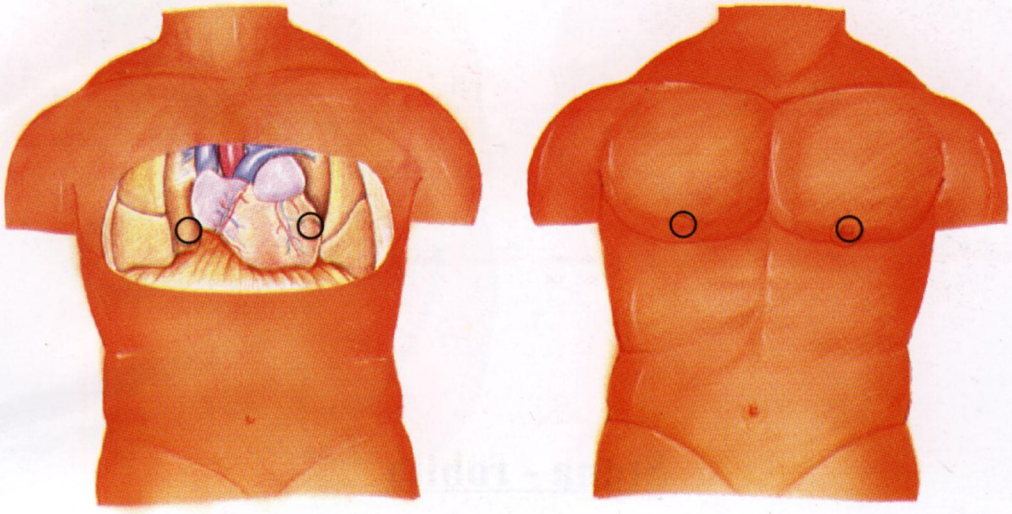
Name	**Nabhi -** (Umbilicus)
Measure & Type	1, *Sira,* 4 *anguli.*
Site	Behind and around the Umbilicus. Controls 3 rd *chakra- Manipura.*
Tissue Involved **Anatomical Structures**	Channels of Annavaha and Raktavaha. Pancreas, *Agni*- Solar plexus, *Pachaka, Ranjaka* Pitta; *Samana* Vata. Inferior epigastric artery and vein. Inferior vena cava. Abdominal aorta. Solar plexus of nerves. Rectus abdominus. Obliqus Externus and Internus muscle..
Signs if injured	Simple injury does not cause sudden death. However if the abdominal aorta is ruptured then it can cause instant death due to shock and haemorrhage. The deep injury may also cause reflex stoppage of the heart. *Sadyha Pranahara* type of marma.
Treatment	**Massage -** For increasing digestion use oil of bay (pimenta racemosa), or ginger or fennel. Using massage of nabhighruta (ghee+rock salt+ camphor) to relieve gas in children is very effective. For this pour sufficient quantity of this ghee in umbilicus and then insert one finger in it. Then carry out pinching type of massage. There will be instant relief of pain and gas accumulated in intestines. For hyperacidity massage with aromatic oil of mogra (murroya paniculata), ***Lepa*** (paste) application - of sandalwood is also useful to alliviate pitta in small intestine. For tapping ascitic fluid in abdomen, select a point 4 anguli distal to lt. paramedian line.





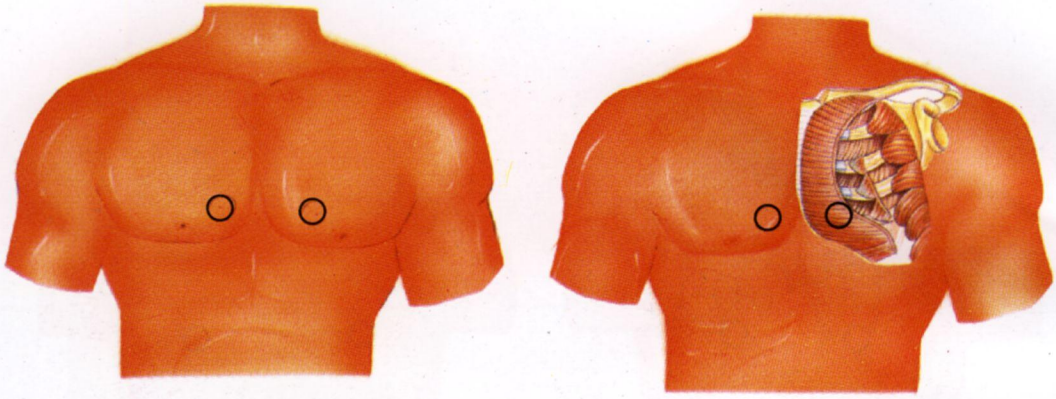
Hridaya

Name	**Hridaya -** (Heart)
Measure & Type	1,*Sira,* 4 *anguli.*
Site	Controls *Rasavaha srotas*, *Sadhaka* Pitta, *Vyana* and *Prana Vata, Ojus, Avalambaka* Kapha and 4 th *chakra* or *Anahata.*
Tissue Involved Anatomical Structures	Ascending aorta. Superior and Inferior Vena Ceva and Pulmonary veins from lungs. Drainage to tracheo-bronchial lymph glands. Vagus nerve. Cardiac muscle. Sternum bone with 2 nd, 3 rd and 4 th ribs.
Signs if injured	Injury will cause severe haemorrhage, shock and death. It is *Sadyha Pranahara* type marma.
Treatment	***Hrid basti*** -is very effective for controlling aggravated Vata, in cases of irregular heartbeats, arrhythmia, angina pectoris etc. **Massage -** for alleviating pitta, in cases of inflamatory diseases of heart like pericarditis massage of sandalwood oil, and aromatic oils of lotus (nelumbo nucifera), henna (lawsonia inermis)



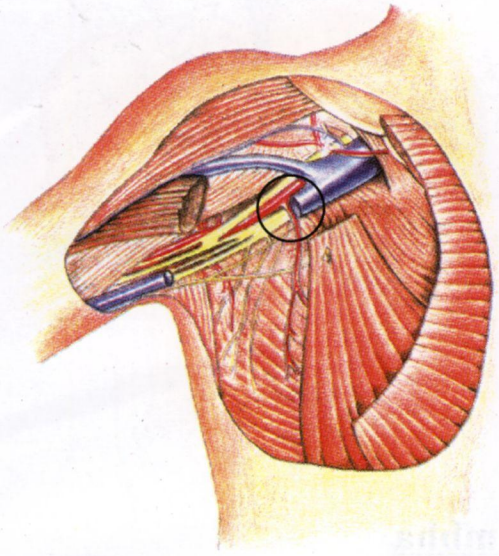
Stana - Mula

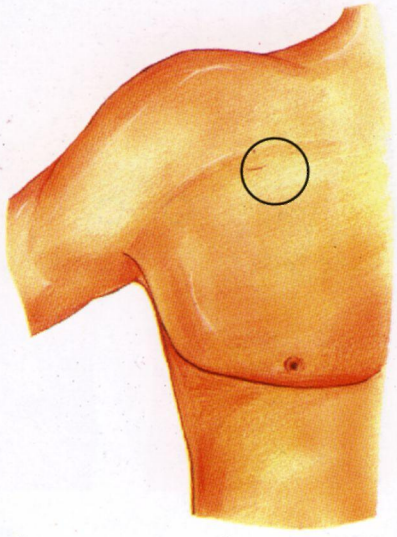
Name	**Stana-mula-** (Root of the breast)
Measure & Type	2, *Sira,* 2 *anguli.*
Site	Breast nipples on both sides. Controls *Mamsavaha srotas.*
Tissue Involved **Anatomical Structures**	Internal mammary artery and vein. Drainage to axillary lymph glands. Vagus nerve and Intercostal nerves. Pectoralis Major and Minor muscles. Intercostal muscles.
Signs if injured	Deep injury can cause Pneumothorax, bleeding and death after some time. It is *Kalantara Pranahara* type of marma..
Treatment	**Massage-** For controlling *mamsavaha srotas* massage with karpas asthyadi oil (karpas and bala) and aromatic oil of jojoba is advised.



Stana - rohita

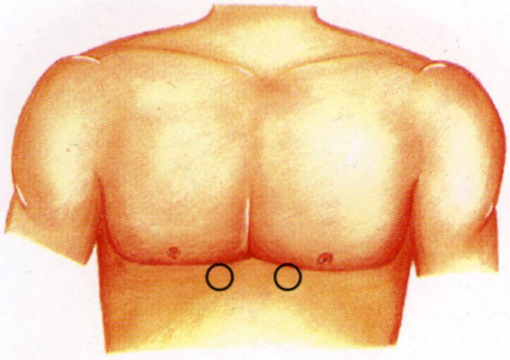
Name	**Stana-rohita** - (Upper regon of the breast)-
Measure & Type	2, *Mamsa,* 1/2 *anguli.*
Site	One-inch medial and 1/2 inch above the nipples. Controls *Majjavaha srotas.*
Tissue Involved **Anatomical Structures**	Intercostal muscles, Pectoralis major and minor muscles. Some portion of the Latismus dorsi muscle. 4 th rib. Vagus nerve. Pulmonary and Internal mammary artery and Ascending aorta. Superior Vena Cava and Internal mammary vein.
Signs if injured	Injury to the Pulmonary artery will cause severe haemorrhage, collapse and death.It is Sadyha Pranahara type of marma.
Treatment	***Suchi-karma*** (acupuncture) -For treating pleurisy and lung abscess, select a point 1 *anguli* lateral to the flanx and nipple of breast. **Massage-**This also controls *mamsavaha srotas* and *majjavaha srotas*,use aromatic oil of juniperberry (juniperus communis).

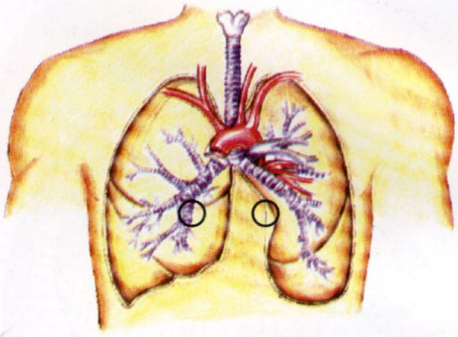




Apalap

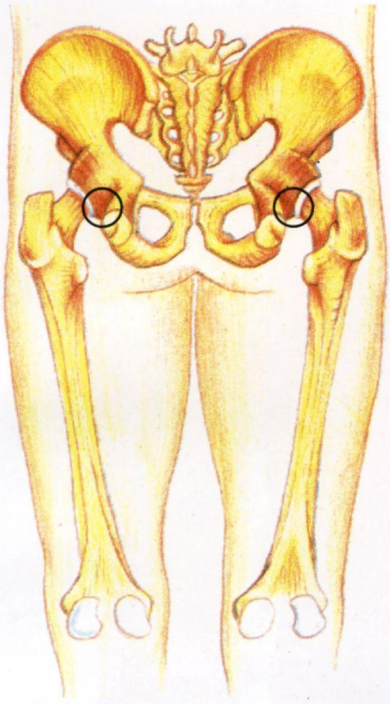
Name	**Apalap -** (Ungarded, the armpit ot the axila)
Measure & Type	2, *Sira,* 1/2 *anguli.*
Site	1/2 inch lateral and downward to the centre of the line joining the sternal and acromial end of the clavicle. Controls *Majjavaha srotas.*
Tissue Involved Anatomical Structures	Subclavian artery and vein. Drainage to the axillary lymph glands. Brachial plexus of nerves. Pectoralis Major and Biceps short head.
Signs if injured	Penetrating type of injury to the Subclavian artery will cause severe haemorrhage and death. It is *Kalantara Pranahara* type of marma.
Treatment	***Abhyanga -*** For controlling *majjavaha srotas*, use asana-eladi oil or aromatic oil of jatamansi and galbanum (ferula species)

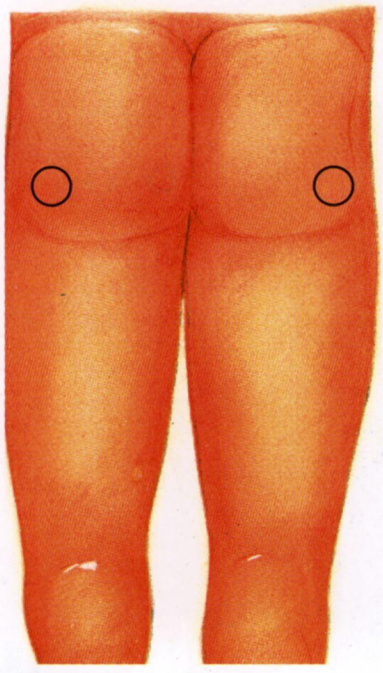




Apastambha

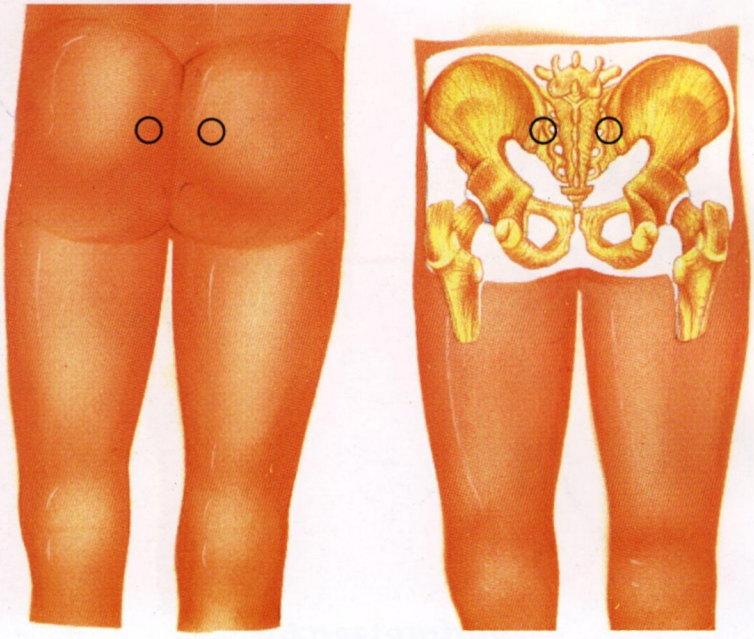
Name	**Apastambha-** (A point on the chest said to carry Prana or life-force)
Measure & Type	2, *Sira,* 1/2 *anguli.*
Site	Medial and downwards of the nipples at the level of the 3 rd Thoracic Vertebra. Controls *Kledaka kapha. Asthivaha* and *Medovaha srotas.*
Tissue Involved Anatomical Structures	Pulmonary artery and tributories of Pulmonary vein, descending aorta. Drainage to Pectoral group and Trachio-bronchial as well as Broncho-Pulmonary lymph glands. Vagus nerve and Bronchus. Pectoralis Major and minor muscles and Intercostal muscle.
Signs if injured	Injury to Bronchi and vessels may lead to haemorrhage and death. It is *Kalantara Pranahara* type of marma.
Treatment	**Massage-** For controlling *medovaha* and *asthivaha srotas,* use kshirabala oil for massage.





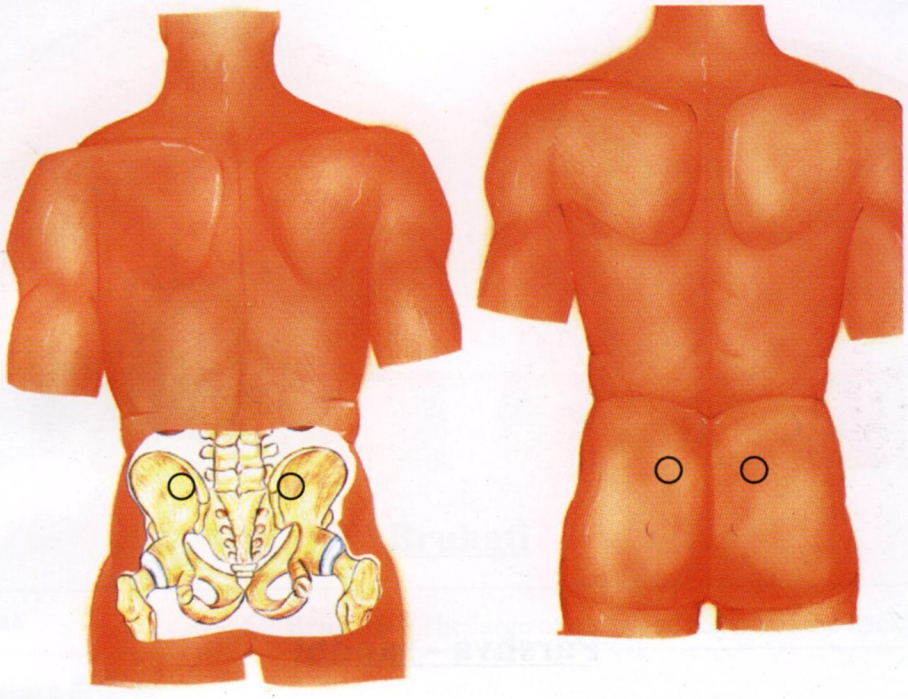
Katika - taruna

Name	**Katika-taruna-**(What arises from the sacrum. The center of the buttocks)
Measure & Type	2, *Asthi,* 1/2 *anguli.*
Site	It is 2 and 1/2 inch downwards and inwards from the greater Trochanter of the Femur, the line joining the greater tronchanter with the ischael tuberosity. Controls *Asthivaha* and *Swedavaha srotas.*
Tissue Involved Anatomical Structures	Post. Aspect of Ileum, Sacro-Iliac ligaments. Superior Gluteal artery and vein. Draining common Iliac lymph glands. Sacral plexus of nerves. Gluteal maximus muscle.
Signs if injured	Injury to the artery will lead to haemorrhage and anaemia. It is *Kalantara Pranahara* type of marma. (Grouping under Asthi marma is not correct.)
Treatment	***Suchi-karma*** (acupuncture) - For treating jeerna jwara (pyrexia of unknown origin) or vishama jwara (malerial type of remittant fever), select point at the center of sacral joint. **Massage -** For controlling *asthivaha srotas* use, dhanvantara oil or gandha oil or aromatic oil of eclipta alba. For controlling *swedavaha srotas* use kakolyadi oil for massage.



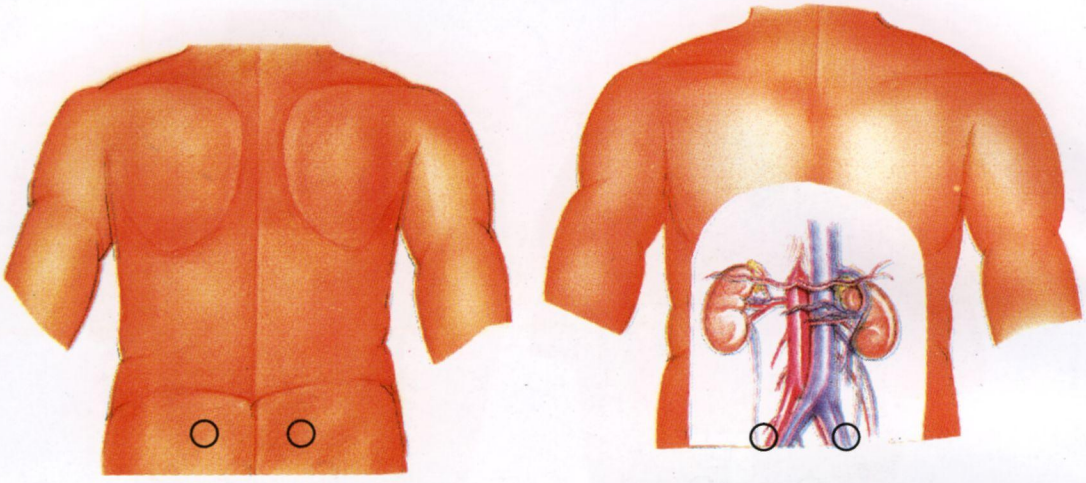
Kukundara

Name	Kukundara - (Marking on the loins on either side of posterior superior Iliac sine)
Measure & Type	2, *Sandhi,* 1/2 *anguli.*
Site	On both post. Superior iliac spine notches. Controls *Raktavaha* - formation of *raktadhatu*-blood.
Tissue Involved **Anatomical Structures**	Ischaeum bone. (No joint structure) Inferior Gluteal artery and vein. Inferior pudendal artery and vvein. Sciatic nerve. Gluteus maximus muscle and Levator ani muscle.
Signs if injured	Injury to sciatic nerve will lead to loss of sensation and paralysis of the lower limb. It is *Vaikalyakara* type of marma.
Treatment	**Massage -** For stimulating *raktavaha srotas* use, manjishthadi oil or kottamchukyadi oil (calamus + garlic+ galangal) or aromatic oil of patchouli (pogoatermom cablim).



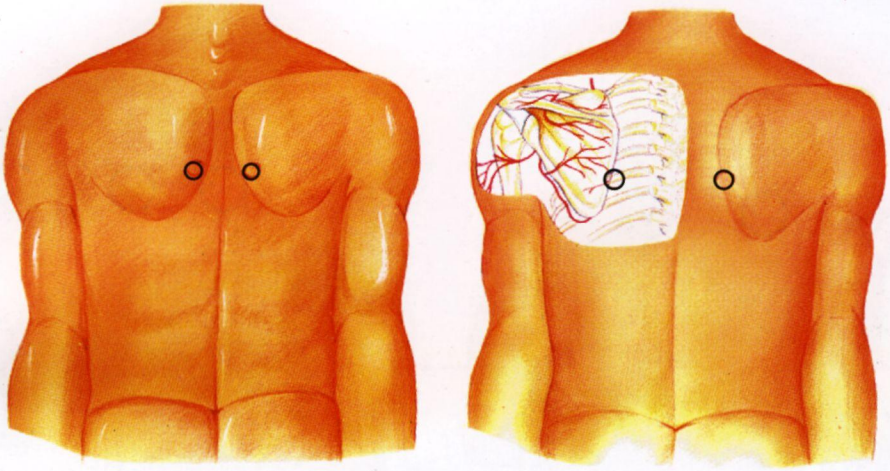
Nitamba

Name	**Nitamba-** (The buttocks - upper region)
Measure & Type	2, *Asthi,* 1/2 *anguli.*
Site	One inch (2 anguli) above kukundara marma. Controls *Rasavaha srotas*
Tissue Involved **Anatomical Structures**	Ilium and Sacrum bone, Sacro-Iliac joint. Anterior and Posterior. Sacro-Iliac ligaments. Sacral plexus of nerves. Psoas major and Iliacus muscle.
Signs if injured	Injury to the iliac bone and sacral plexus will cause functional loss and wasting of the muscles. It is *Kalantara Pranahara* type of marma.
Treatment	**Massage-** For controlling *rasavaha srotas* use nimba oil and for controlling *asthivaha srotas* use nimbapatradi oil.



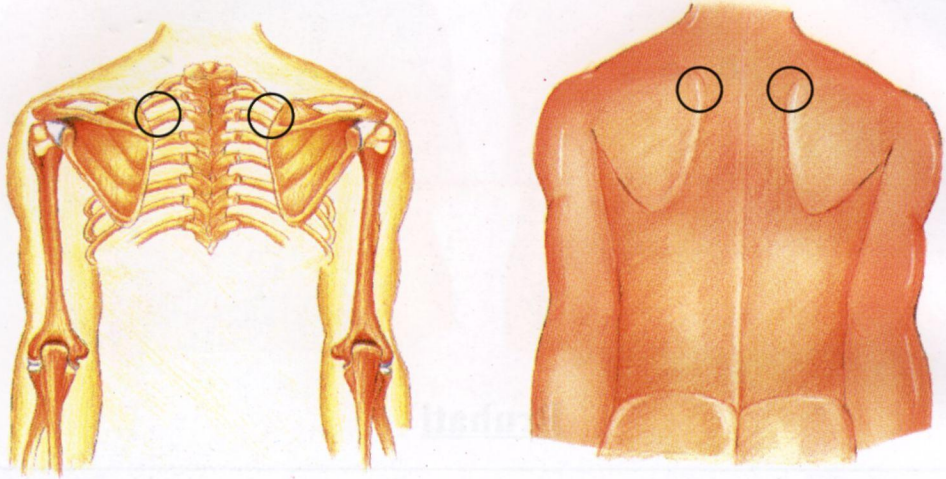
Parshva - sandhi

Name	**Parshva-sandhi-** (The side of the waist)
Measure & Type	2, *Sira*, 1/2 *anguli.*
Site	Controls 2 nd *chakra- Swadhisthana*, Adrenal glands, ovaries and the channels of *Annavaha, Pranahava.*
Tissue Involved Anatomical Structures	Common-Iliac artery and Drainage of veins from Pelvic and leg area. Drainage to common Iliac group of lymph glands. Hypogastric plexus of nerves. 5 th Lumbar and 1 st Sacral Vertebra. Lumbo-Sacral joint.
Signs if injured	Injury to the Common Iliac artery will cause severe haemorrhage. It is *Kalantara Pranahara* type of marma.
Treatment	***Suchi-karma*** **-**(acupuncture) -For treating dysentery and diarrhoea select a point 4 anguli medial to the marma. **Massage-**For controlling 2 nd *chakra (swadhisthana),* (and annavaha, adrenal and ovaries), use vacha-lashunadi oil or aromatic oil of caraway (carum carvi).



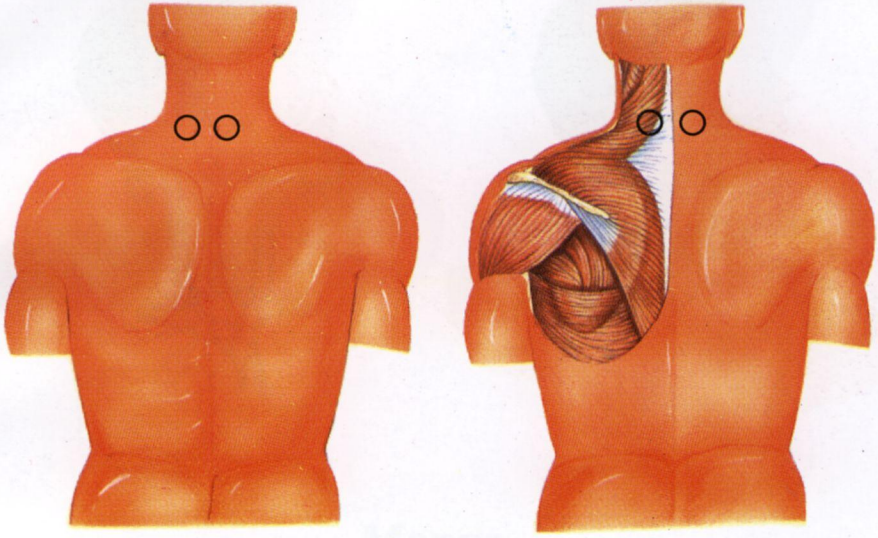
Bruhati

Name	**Bruhati-** (The large or the broad region of the back)
Measure & Type	2, *Sira,* 1/2 *anguli.*
Site	Three inch above the Inferior angle of the Scapula in the middle border, at the trangular space. Controls 4 th chakra- *Anahata* and *Rasavaha srotas.*
Tissue Involved **Anatomical Structures**	Subcapsular artery and Vein, Drainage to the Sub-Scapular group of Axillary lymph glands. Supra-scapular and circumflex nerve. Infra spinatus, Teres Major and Minor, Trapazius muscles.
Signs if injured	Superficial injury will cause damage to the vessels and deep injury will cause damage to the lungs. It is *Kalantara Pranahara* type of marma.
Treatment	***Suchi-karma-*** (acupuncture) - For treating frozen shoulder, atrophy of arm muscles, select a point 1 anguli medial to the marma. **Massage-** This marma controlls 4 th *chakra (anahata), annavaha* and *rasavaha srotas.* For improving the functions of rasavaha srotas, use rasataila (bala+meat) or himasagara oil (asperagus+manjishtha -rubia cordifolia- + kushmanda) For *annavaha srotas* aromatic oil of fennel (foeniculum vulgare) or thyme (thymus vulgaris) are indicated.



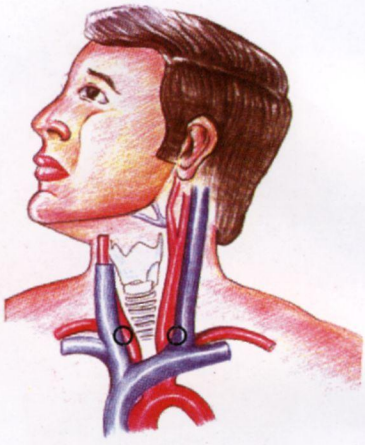
Amsaphalaka

Name	**Amsaphalaka-** (The shoulder blade)
Measure & Type	2, *Asthi,* 1/2 *anguli.*
Site	On the scapula bone above bruhati. (1/2 inch lateral to the 5 th, 6 th , 7 th cervical and 1 st Thoracic vertebra. Controls *Pranavaha srotas*
Tissue Involved **Anatomical Structures**	5,6,7 th thoracic and 1 st Thoracic vertebra. Sub clavian artery and vein. 5,6,7, th thoracic nerve. Trapezeus and Rhombidus Major muscles.
Signs if injured	Injury to the nerve may cause disfunction of the muscles and wasting leading to deformity. It is *Vaikalyakara* type marma.
Treatment	**Massage-** For improving the functions of *pranavaha srotas,* use mahanarayan oil, shefali oil or aromatic oils of blue cham omile (matricaria chamomilla) and lemonbalm (melissa officinalis).



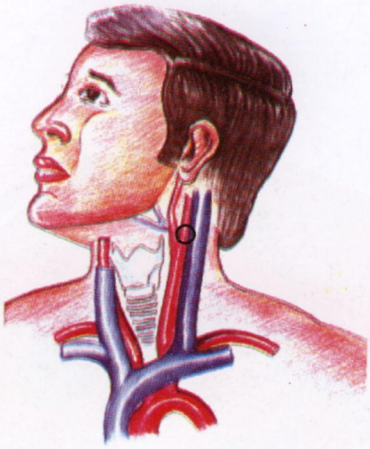
Amsa

Name	**Amsa -** (The shoulder)
Measure & Type	2, *Snayu,* 1/2 *anguli.*
Site	Between the neck and arms, on the trapezius muscle. 1/2 inch lateral to 5 th Cervical vertebra. Controls 5 th *chakra, Vishudha. Bhrajaka Pitta, Udana Vata* and Brain
Tissue Involved Anatomical Structures	Trapezeus and Levator scapuli muscles. Sub scapular artery and vein. Drainage to the Sub scapular group of axillary glands. Scapula bone and coraco-acromial and Supra scapular ligaments. Phrenic and 3, 4 th cervical nerve.
Signs if injured	Injury to the muscles and the ligaments will produce deformity. It is *Vaikalyakara* type of marma.
Treatment	**Massage-** This marma controls 5 th chakra *(vishudha),* For controlling *bhrajaka pitta* oils of jasmin and kewada are best. For *Udana* Vata aromatic oil of myrtle (myrtus communis) is advised.



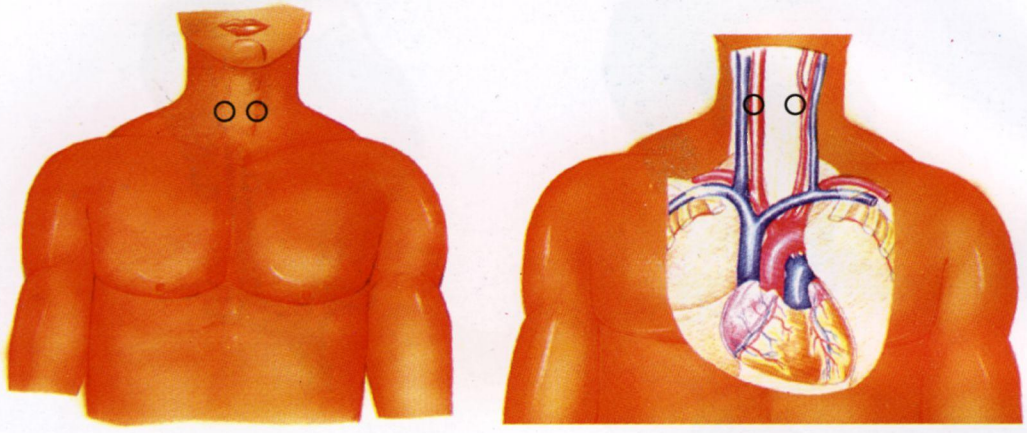
Nila

Name	**Nila -** (Dark blue- the colour of the skin at this point)
Measure & Type	2, *Sira*, 4 *anguli.*
Site	The point just lateral to trachea in the neck. Controls *Bhrajaka* Pitta, Thyroid and Brain.
Tissue Involved **Anatomical Structures**	Internal and External Carotid artery. Anterior Jugular vein. Upper deep cervical group of lymph glands. Accessory nerve supplying sterno-mastoid and recurrant laryngeal branch. Primary rami of 4 th, 5 th and 6 th cervical nerves.
Signs if injured	Although the name Nila indicates blood vessels, the symptoms are of injury to the laryngeal nerve producing paralysis of vocal cords leading to loss of voice. It is *Vaikalyakara* type of marma.
Treatment	**Massage-** For *bhrajaka* pitta use oil of eclipta alba or lavender.



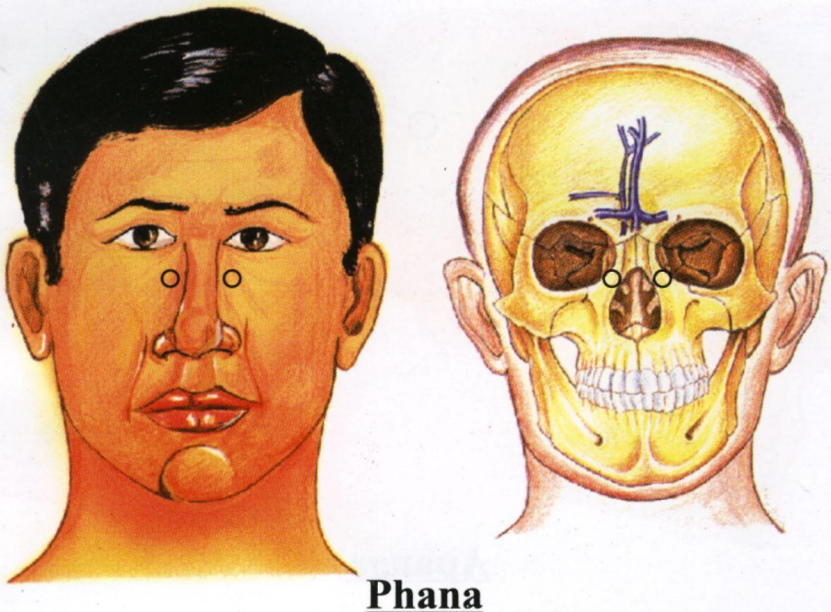
Manya

Name	**Manya -** ('Honour' due to its connection with the voice)
Measure & Type	2,*Sira*,4 *anguli.*
Site	1/2 inch downwards and backwards to the angle of mandibular bone. Controls *Rasavaha* and *Raktavaha.*
Tissue Involved **Anatomical Structures**	Ext. carotid artery, Ant. Jugular vein. Lymph drainage of upper cervical glands. Glassopharyngeal nerve, Lingual nerve and Accessory nerves.
Signs if injured	Injury to the nerves will result into loss of sensation and taste of the tongue and its paralysis also. It is *Vaikalyakara* type marma.
Treatment	**Massage -** For controlling *rasa* and *raktavaha srotas*, use sandalwood oil, or aromatic oil of tea tree (melaleuca alternifolia).



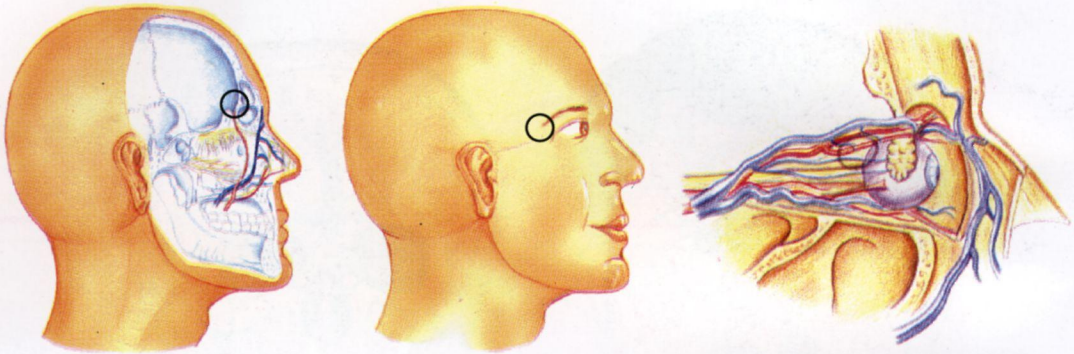
Sira Matruka

Name	**Sira Matruka** - (Mother of blood vessels)
Measure & Type	8, *Sira,* 4 *anguli.*
Site	1/2 inch lateral to the outer tendon of Trachea. Controls *Majjavaha srotas.*
Tissue Involved Anatomical Structures	Branches of common Carotid artery - front and back of neck, face, side of head, meninges, middle ear, thyroid, tongue, tonsil, internal ear and forehead. Int. jugular vein receiving from face, neck, thyroid. Vagus and Phrenic nerves.
Signs if injured	Injury to the blood vessels will cause severe haemorrhage, collapse and death. It is *Sadyha Pranahara* type of marma.
Treatment	**Massage-** It is advisable to use jyotishmati or shankhapushpi oil or aromatic oil of angelica (angelica officinalis) for controlling *majjavaha srotas.*



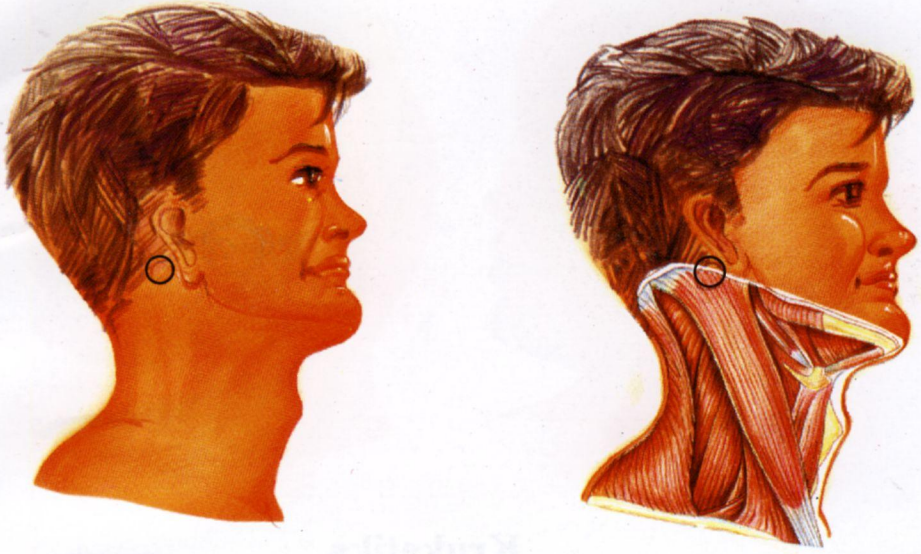
Phana

Name	**Phana** - (A serpant's hood' on the side of nostrils)
Measure & Type	2, *Sira,* 1/2 *anguli.*
Site	In the level of the saddle of the nose. Controls Sense organ of smell
Tissue Involved **Anatomical Structures**	Facial artery and vein. Branches of olfactory nerves and Facial nerve. Orbicularis oris and Levator labii sup. muscles. Nasal, Frontal and ehtmoid bones. Submandibular lymph supply.
Signs if injured	Injury will produce deformity of the nose and face. If the nerves are injured then it may cause loss of sensation of smell. It is *Vaikalyakara* type marma.
Treatment	***Suchi-karma-***(acupuncture) - For treating anosmia, select a point 1/2 anguli medial to this marma. **Massage-** For treating sense organ of smell use of aromatic oil of cinnamon (cinnamomum zeylanicum) is good.



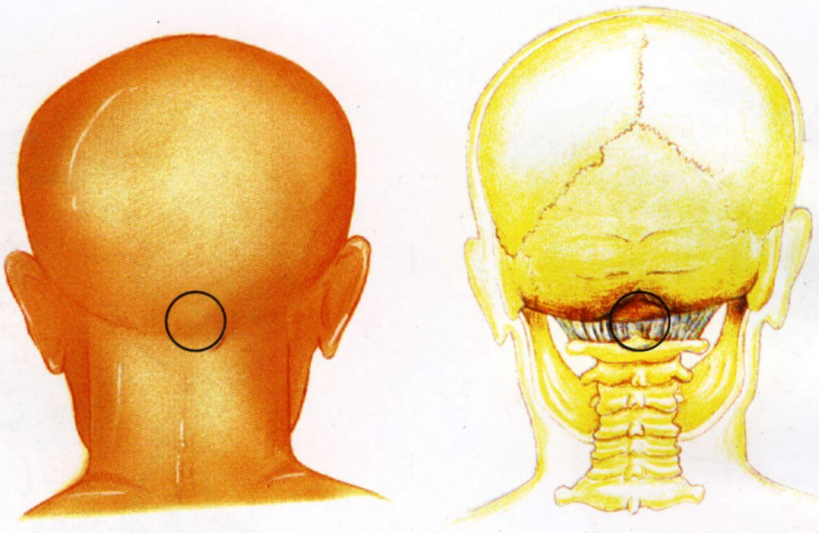
Apanga

Name	**Apanga** - (The outer corner of the eye)
Measure & Type	2, *Sira,* 1/2 *anguli.*
Site	At the outer angle of eye. Lateral side of orbital fossa. Controls Sense organ of sight.
Tissue Involved **Anatomical Structures**	Anterior Ciliary arteries and veins. Drainage to the superficial parotid lymph glands. Optic and ciliary nerves. Sphenoid, Maxillary and Zygomatic joints.
Signs if injured	Injury may produce blindness and deformity of the face also. It is *Vaikalyakara* type marma.
Treatment	***Suchi-karma-*** (acupuncture) -For treating glaucoma, headache and stye acupuncture should be done 1 anguli above this marma. **Massage-** For treating sense organ of sight, use of triphala oil or aromatic oil of vetiver (vetivera zizanoides) is advised.



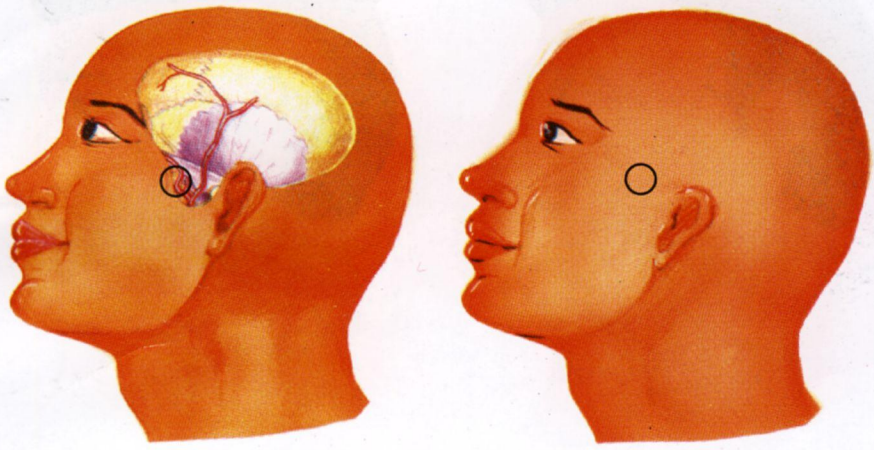
Vidhura

Name	**Vidhura-** (Distress, due to its sensitive nature)
Measure & Type	2, *Snayu,* 1/2 *anguli.*
Site	Behind and below the ear. Just below the mastoid bone. Controls functions of sense organ of hearing.
Tissue Involved **Anatomical Structures**	Mastoid muscle. Facial nerve, Great Auricular nerve and Auditory nerve. Basilar and Posterior auricular artery. Post auricular vein.
Signs if injured	Injury will cause deafness. It is *Vaikalyakara* type marma.
Treatment	***Suchi-karma-*** (acupuncture) - For treating ear diseases like otalgia,carry out acupuncture 4 *anguli* above this marma **Massage -** For treating sense organ of hearing, use dhanvantara oil.



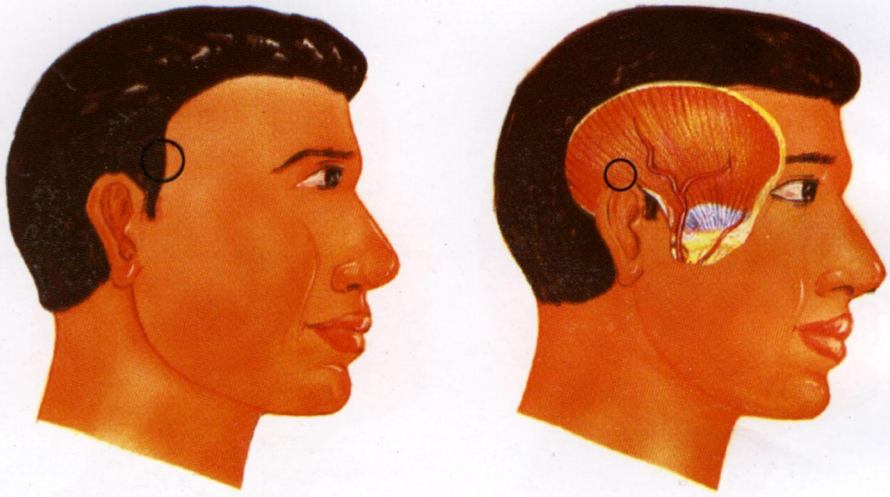
Krukatika

Name	**Krukatika -** (The joint of the neck)
Measure & Type	2, *Sandhi,* 1/2 *anguli*
Site	At the junction of neck and head. Controls posture.
Tissue Involved **Anatomical Structures**	Atlanto-occipital joint. Occipital and 1 st cervical bone. Anterior longitudinal, Anterior and Posterior Primary ramus nerves. Vertebral artery and vein. Rectus capitis lateralis and Rectus capitis anterior muscles.
Signs if injured	Injury to the joint will lead to limitation of the movement of the head and deformity. The dislocation of the joint could produce instant death also by pressing on the medulla oblongata. It is *Vaikalyakara* type of marma but should also be included in *Sadyha Pranahara* type.
Treatment	**Massage -** If the patient is unable to maintain his posture, use devadarvyadi oil.



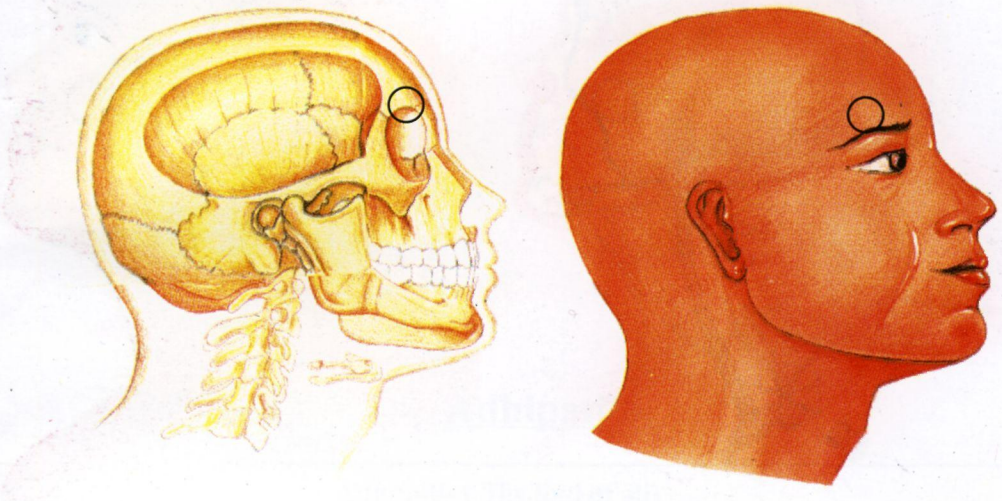
Shankha

Name	**Shankha** - ('Conch' the temple)
Measure & Type	2, *Asthi,* 1/2 *anguli.*
Site	In between the tragus of the ear and the lateral corner of the eye. Controls sense organs of touch and Vata in large Intestine.
Tissue Involved **Anatomical Structures**	Temporal bone along with Temporal muscle. Temporal and Internal Carotid artery. Temporal vein. Drainage to the Superficial Parotid glands. Facial and Corda typmani nerve.
Signs if injured	It is *Sadyha Pranahara* type marma as the injury may cause damage to the brain, can cause haemorrhage and sudden death.
Treatment	***Suchi-karma-*** (acupuncutre) -For treating epilepsy carry out acupuncture 2 *anguli* distal to temporo-mandibular joint. **Massage -** For treating any problems of sense organ of touch (skin) use ashwagandha oil.



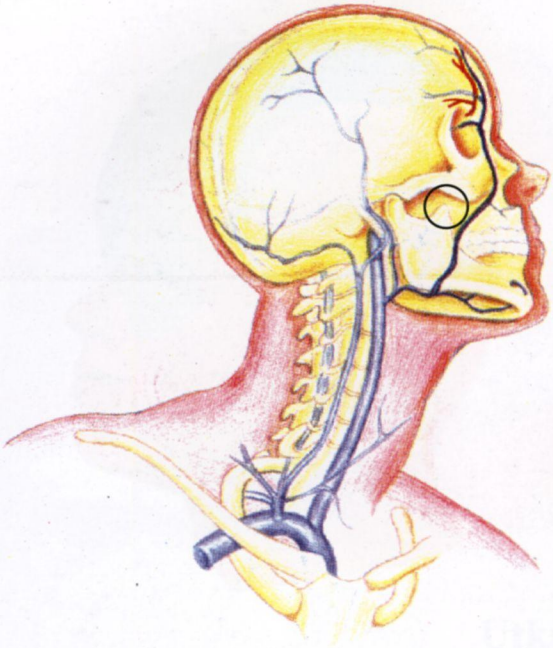
Utkshepa

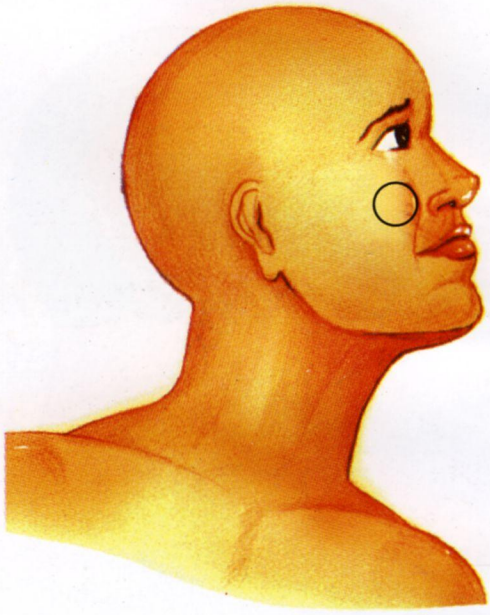
Name	**Utkshepa -** (What is upwards)
Measure & Type	2, *Snayu,* 1/2 *anguli.*
Site	Behind the upper border of the helix of the ear. 2 *anguli* above shankha marma. Controls Vata and sense organ of smell
Tissue Involved **Anatomical Structures**	Temporal muscle. Temporal bone. Temporal, Zygomatic temporal and Internal Carotid artery. Anterior temporal diploic vein. C2 and C3 nerves.
Signs if injured	Injury will cause severe haemorrhage. Why this has been included under *Vishalyaghna* type is not clear.
Treatment	***Suchi-karma*** (acupuncture) -For treating psychological aggressive disorders like unmada, select point 1 *anguli* above, on the border of hairline. **Massage -** For controlling Vata disorders use bala oil.



Avarta

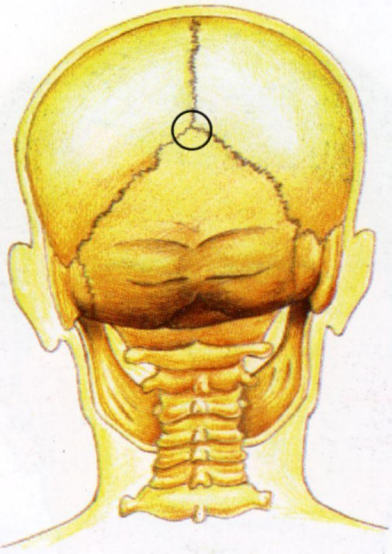
Name	**Avarta -** ('Calamity' - very sensitive)
Measure & Type	2, *Sandhi*, 1/2 *anguli.*
Site	In the upper border of orbital cavity formed by the Frontal bone. At the centre of eyebrows, above apanga, on the forehead. Controls Vata and body posture.
Tissue Involved **Anatomical Structures**	Frontal bone. Sphenoid and Frontal joints. Levator superioris and Superior rectus muscles. Optic and Frontal nerve. Opthalmic and Supra orbital artery. Superior opthalmic vein.
Signs if injured	Injury will cause disfigurement of the face. It is *Vaikalyakara* type marma.
Treatment	**Massage-** For controlling Vata disorders use dashamoola oil.





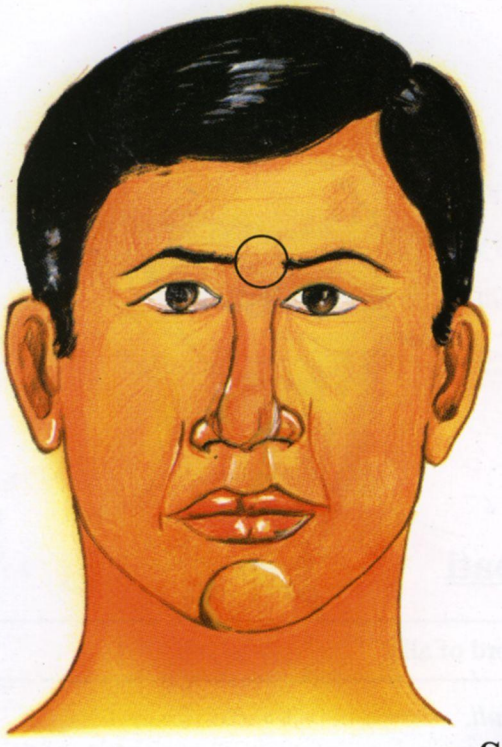
Shringataka

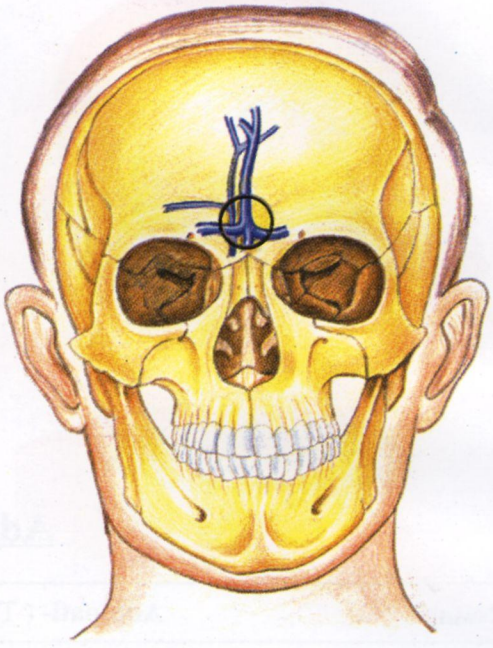
Name	**Shringataka-** (Place where four roads meet)
Measure & Type	4, *Sira,* 4 *anguli.*
Site	At the meeting point of tongue, nose, eyes, ears on the soft palate. From the inner side it is 1/2 inch above sthapani. Controls *Prana, Bodhaka* kapha and sense organ of taste.
Tissue Involved **Anatomical Structures**	Supra orbital artery. Frontal diploic vein and Superior sagital sinus. Occipito Frontalis muscle. Opthalmic nerve.
Signs if injured	Injury will cause severe haemorrhage and death. It is *Sadyha Pranahara* type marma.
Treatment	**Massage -** For treating all diseases of mouth and *bodhaka* kapha use ksheerabala oil, or aromatic oil of peppermint (mentha piperita).



Adhipati

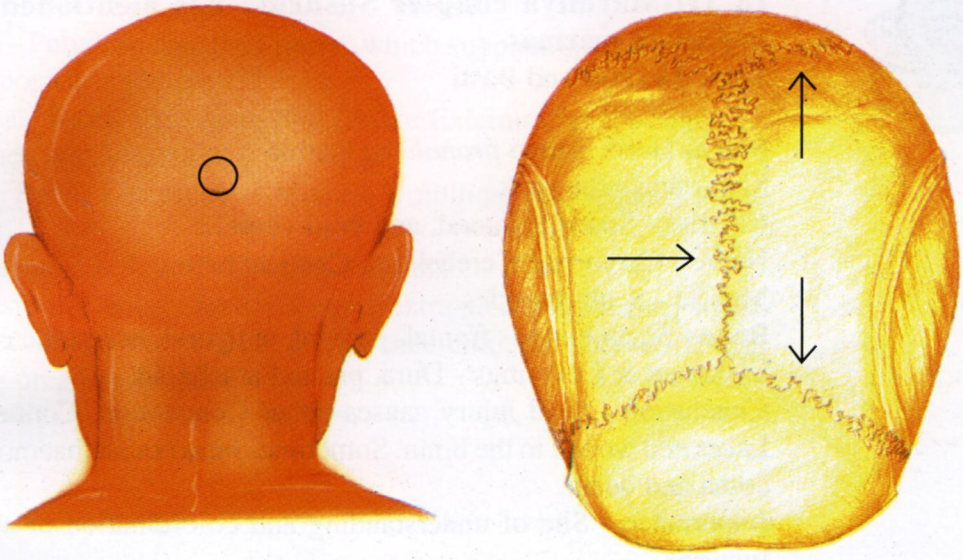
Name	**Adhipati-** (The lord of all)
Measure & Type	1, *Sandhi,* 1/2 *anguli.*
Site	Posterior Frontalle. Top of the cranium. Controls 7 th *chakra- Sahasrara* and *Majjavaha srotas, Prana Vata, Tarpaka* Kapha and *Sadhaka* Pitta.
Tissue Involved **Anatomical Structures**	Occipito- Parietal joint. Occipital and Parietal bone. Occipital artery. Posterior diploic vein and Occipital Sagital sinus. Medula oblongata and C2, C3 nerves.
Signs if injured	
Treatment	After birth, the anterior fontanele is wide open. Due to incomplete ossification, the top portion of the skull is only covered by thin skin. For quick healing it is therefore advisable to apply every day sesame oil. This also nourishes *Prana* Vata. ***Pichu dharana*** **-** keeping gauze diped in medicated oils like dhanvantara is useful for treating Vata disorders. ***Abhyanga-*** For treating *sadhaka* pitta disorders in brain, use oil of brahmi (centela asiatica), for treating disorders of *Prana,* use oil of dhanvantara, or aromatic oil of violet leaf absolute (viola odorata), For treating disorders of *Tarpaka* kapha use oil of cedarwood.





Sthapani

Name	**Sthapani -** (That gives support)
Measure & Type	2, *Sira,* 1/2 *anguli.*
Site	In between the eyebrows. Position of third eye. Controls 6 th *chakra*- Ajnya and *Prana*
Tissue Involved **Anatomical Structures**	Supra Orbital and Facial artery. Anterior Facial vein, Superior sagital sinus. Drainage to Submandibular lymph glands. Supra orbital nerve. Frontal bone.
Signs if injured	It is not known why it has been included under the group *Vishalyaghna* type. Deep injury will cause damage to the brain and sudden death. It should be under *Sadyha Pranahara* Type.
Treatment	***Shirodhara -*** For treating disorders of 6 th *chakra (ajnya)* and *Prana* Vata, pouring slow drip of dhanvantara oil on this marma is very useful.



Simanta

Name	**Simanta -** (The sumit, the skull and the surrounding joints)
Measure & Type	5, *Sandhi,* 4 *anguli.*
Site	Coronal, Sagital and Lambdoid sutures in the skull. Controls *Majjavaha, Rasavaha* and *Raktavaha srotas.*
Tissue Involved **Anatomical Structures**	Parietal-Frontal, Parietal-Temporal and Parietal -Ocipital joints. Occipito -Frontalis muscle and Epicranial apponeurosis. Opthalmic and Maxillary nerves and C2, C3 nerves. Anterior Superficial Temporal, Posterior Superficial Temporal and Occipital arteries. Occipital diploic vein, Posterior parietal, Anterior parietal and Frontal parietal veins.
Signs if injured	Injury may cause paralysis, haemorrhage or sudden death. It is *Sadyha Pranahara* type marma.
Treatment	***Abhyanga-*** application of medicated oils like dhanvantara, bhrungaraja to the marma is useful for alliviation of doshas. Keeping *Pichu* at the point is also useful. Soon after the delivery, every day sesame oil is applied to this marma for controling Vata and keeping health.

In Tri-Marmiya chapter Sushruta has mentioned three important marma-
Shira, Hridaya and Basti

Shira- Head, Sadyo *pranahara* marma.
Site - above the neck.
Cavities - Space in lateral, and third verticle.
Nerve - Cerebrum, Cerebellum, Cranical nrves.
Muscle - Scalp muscles.
Bone - Scalp bones - frontal, parietal, temporal, oceiptal etc.
Ligamnet & Coverings - Dura, pia and arachnoid.
Conclusion - head injury causes either Concussion, Contusion or Lacerated wound to the brain. Sometimes intra cranial haemorrhage, coma and death.
Importance - Site of understanding and co-ordination of all body fuctions.

Hridaya - Stanayor Madhyam, Sadyopranahara-maranam (Sira Marma),
Site _ Mid of the Sternum.
Artery - Ascending Aorta - supplies the whole body.
Vein - Sperior Vena Cava - Tributaries of the Upeer limb.
Inferior Vena cava - Tributaries of the Lower limb.
Pulmonary Veins from the lungs.
Lymph - Drainage to Tracheo-Bronchial Lymph Glands,
Nerve - Vagus- Deep cardiac plexus, coronary and pulmonary plexus,
Muscle - Cardiac Muscles,
Bone - Sternum, 2nd 3rd and 4th Rib, Joint- Sterno costal joint,
Ligament - Capsular and sterno-costal ligaments.
Conclusion - Injury here will cause severe haemorrhage, collapse, death, Also due to loss of cardiac propulsion, no oxygenated blood supply to the tissues and brain - both cellular and central death which commence suddenly.
Importance - Site of Resuscitation,
Sadhaka Pitta, Vyana Vayu,

Basti
Site - In between Syphysis Pubis & Umbilicus,
Artery - Hypogastric Artery - Abdominal wall, External iliac & Internal iliac
Vein - External and internal iliac vein
Lymph - Drainage to medial sacral and Internal and External iliac lymph glands.

Nerves - Pelvic spalanchnic nerve, which supplies spleen, pancreas and hypogastric plexus.
Muscles - Retus abdominus and Oblige Externus, which compress Abdomen and Viscera.
Bone - Pubic Ligaments - Median Umbilical fold, Superior and inferior.
Pubic ligaments Joints - Symphysis Pubis.
Conclusion - Damage here will cause extra-vasation of urine, which will spread over the perineal membrance upto, the abdominal wall causing ureamia - death.

Chapter 11

Marma Therapy

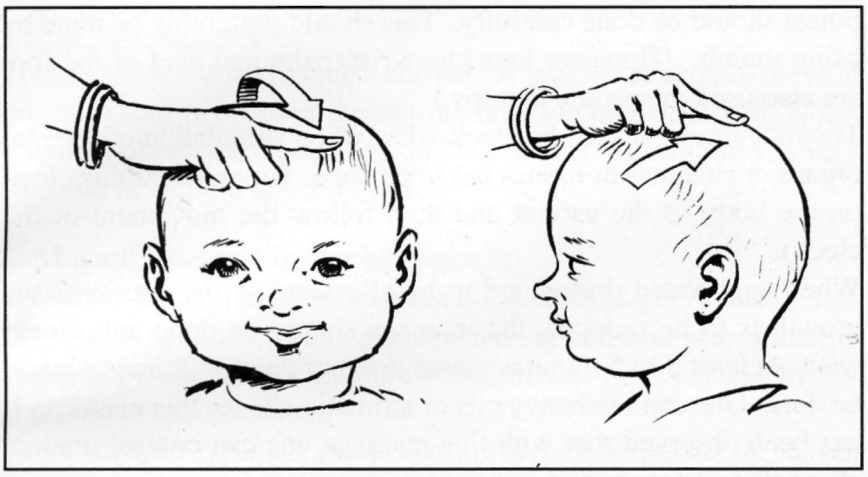
Marma points are specific areas on the body, which has relation thorough Pranic channels to various internal organs, doshas and srotasas. As the technique of massage developed, these points were used to stimulate the internal organs.

1. Therapeuttic areas - at these sites various procedures like massage, acupuncture, applying heat -like moxibustion, applying various ointments and heavy or aromatic oils or applying acu- magnets can be carried out.
2. Lethal areas - when injured due to blows or weapons etc. can produce severe pain, disability or even death.

These points can be used for therapeutic purpose. In *Sushruta Samhita,* three therapies - *Siravyadha, Agnikarma* and *Ksharakarma,* have been discussed. In these treatments certain pointshave been correlated with certain internal organs. Taking these references into account, Marma therapy has been developed. One can control (stimulation or suppression) internal organs, doshas and channels thorough various Marma points. For this purpose
Various methods can be used -

1. *Abhyanga* (Massage - with heavy oils and aromatic oils)
2. Biomagnetic therapy,
3. *Lepa* -applying herbal pastes, ointments,
4. *Agnikarma*- applying slight heat, near marma points like moxibustion,
5. *Ksharakarma*- applying herbal alkalis near marma points like chemical cautery
6. *Suchi vedha* - (acupuncture)
7. *Mardana* - acupressure,

One should however remember that all these therapies should not



be applied to all marma points. Those marma points which have been categorized under *Sadyhaprnahara*-and Tri-Marma (*Shira, Hridaya,* and *Basti*) should be excluded from the treatments like acupuncture, giving heat or applying steam.

1. Marma Therapy by *Abhyanga, Mardana,* Acupressure

Abhyanga or massage is an important tool to treat internal organs through Marma points. But it is recommended to do massage to the whole bady by one of the suitable methods mentioned in *Samhitas.* Some basic styles of massage -

1. *Snehana* - Massage with oil.
2. *Gharshana* - Dry powder massage or massage with silk cloth/ gloves.
3. *Udvartana* - vigorous rubbing of herbal powders or herbal pastes.
4. *Chavitti* - Chavitti means feet. The masseur using his feet does the massage.
5. Pizichil - In this type the masseur takes warm oil in a pan, soaks a piece of cloth in it and squeezes it over the body.
6. Kizhi - means poultice. This is a massage with poultice.

(See **Panchakarma and Ayurvedic Massage** - book by Dr. Lele, Dr. Ranade and Dr. Quatab for detail information)

Selection of one of the above style can be done according to season, condition of the individual and constitution. Then follow the specific marma massage.

Marma Massage

All marmas are very sensitive areas. Hence massage at this vital

points should be done carefully. This should preferably be done by using thumb. (However knuckle, wrist, palm and heel of the foot are also used in specific therapy.)

The movement should be clock-wise, when stimulation of internal organs or channels or tissues has to be done. (Imagine putting clock on the body of the patient and then follow the movement of the clock).

When aggravated doshas are to be alleviated or the excess tissue growth is to be reduced, the massage should be done anti clock-wise. At least 3 to 5 minutes massage every day for 2 times, should be done. One can use heavy oils or aromatic oils for this massage. It has been observed that with this massage one can control internal channels and organs and can treat doshas also.

For balancing doshas, following oils can be used.

Vata - Sesame, olive, almond.
Basil, cedarwood, cinnamon, clove, geranium, jasmine, lavender, myrrh, Musk, orange, and sage.

Pitta - Coconut, sunflower, sandalwood
Camomile, cinnamon, gardenia, honeysuckle, lotus, mint, rose And saffron.

Kapha -Mustard, sesame, corn, jojoba.
Basil, camphor, clove, eucalyptus, frankincense, juniper, Lemon, marjoram, musk, myrrh, peppermint, rosemary and sage. *Shirodhara* is a special type of dhara massage over the sthapani marma.

2. Marma therapy by Biomagnetics

Electro-magnetism is an important force found in the nature. This can be compared with Prana in Yoga, Vata in Ayurveda, Qi in Traditional Chinese Medicine and the bioelectrical energy of the brain and the nervous system. The diseased cells lose their magnetic equilibrium and this can be set right with the use of proper magnets. Dr. Albert Roy Davis has done lot of research on the energy related with south and north poles of the magnets. He showed that the electrons coming from the South pole moved clockwise and that coming from North pole move anti-clockwise.

The strength of the magnet is measured in terms of Gauss, which is related with the lifting power of the magnets. If the magnet can lift 2-pound weight it is known as having 500 to 600 Gauss.

Bio-magnetic therapy means applying magnets directly on the skin to relieve pain, muscle stiffness and blood circulation.

Use of acu-magnets

These are very small magnets and can be applied directly to the skin on the tender point over the marma area for relieving pain. North magnet pole should be applied on these points. This therapy is very safe and is without any side-effects.

3. Marma Therapy by herbal paste

Treatment by applying herbal paste is called the *Lepa Chikitsa.* It is very useful to reduce swelling and pain if applied over proper marma area. They also give strength and stability to bones and joints by applying to specific area.

There are three types of *Lepa* according to the thickness of the herbal paste.

1. *Pralepa* - Thin paste
2. *Pradeha* - Thick paste
3. *Aalepa* - Medium paste

Aalepa is more indicated. It has 10 sub types. Add oil or ghee 1/4th for Vata, 1/6th for pitta and 1/8th for kapha before applying over the marma point. Usually it is applied opposite to the direction of hair. Thus it can reach the tissues and inner glands and act properly.

This therapy can be used on following marma points-

1. Sthapani, Shankha - herbal paste of ginger, calamus, nutmeg and clove should be applied for headache, sinusitis
2. Shringataka - Herbal paste of curcuma should be applied for Hiccough
3. Nabhi - for constipation, gases - apply paste of haritaki (Terminalia chebula) ans asafoetida

4. Marma Therapy by Agnikarma

(To be done only by authorised registered medical practitioners)

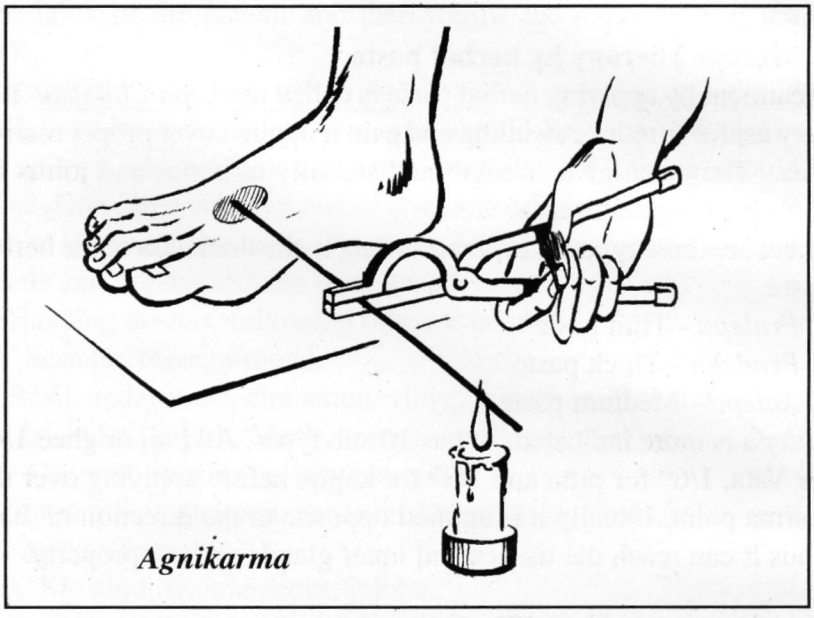
This therapy cannot be applied to all marma points. *Sadyhapranahara* marma-those when injured cause sudden death - like Marma on head - Adhipati, Hridaya, Nabhi and Basti - should preferably be excluded from this application of heat.

Instruments of Agnikarma

For application of heat, *Sushruta* has advised using various types of *Shalaka* - thin probe type instruments - cautery instruments - made up from gold, silver, copper, iron or alloys of two or three metals. Herbs such as piper lungum, jambu seeds, jaggery and animal products such as fat, teeth, honey, wax are also used for *agnikarma.*

Procedure of Agnikarma

1. Preliminary procedure - Pitta pacifying diet with unctuous food is recommended before *agnikarma.* No food is given (fasting) when *agnikarma* is indicated for calculus, piles (haemorrhoids), fistula - in -ano and in oral cavity problems.



Agnikarma

Since marma points are very sensitive, direct heat should not be applied to these points. Instead, one end of these instruments should be applied to the sensitive point near marma where *Agnikarma* or heat application is advised and the other end of this *shalaka* should be heated on candle. The heat will travel from one end to the other end by method of conduction and that much heat will be sufficient for the treatment purpose.

There are many types of *agnikarma.* When dealing with marma one should carry out only up to the level of skin *(twak dagdha)* and not the muscle deep type *(Mamsa dagdha).*

Other types are according to the shape of the burn created by the cautery - *bindu* (pointed), *ardha chandra / vilekha* (half circle), *chandrakruti / valaya* (circular). Out of all this points bindu type i.e. pointed type is indicated in marma therapy.

Agnikarma on specific marma points -

This treatment is indicated for the following marma points-

1. Kurchashira- on sole for growth of excess bone, vatakantaka (calcenial spur).
2. Kurcha -on sole - Hepatic coma- Right kurcha
   Splenomegaly - growth of spleen - Left Kurcha

3. Katikataruna - For sciatica pain
For joint pain in knee - Janu.
For joint pain in elbow - Kurpara
For joint pain at wrist- Manibandha
For all types of joint pains one should select the tender most point on the Joint nearest to the marma site.

2. Care for Agnikarma - Apply honey and ghee (clarified butter) after *agnikarma.* Ghee medicated with Licorice is more preferable

3. Contra indications - Weak individuals, aggravated pitta, area of *Sadyha pranahara* marma and in summer.

5. Marma Therapy by *Kshara karma* (alkalies)
(To be done only by authorised registered medical practitioners)

Qualities & functions of *Kshara* - These are prepared from different herbs which are dominant in fire element. Thus it has penetrating action. It is white in color and acts on all three doshas. It has cleansing, cauterising and detoxifying effect.
Medium quality *Kshara* is recommended for therapy. That means it should not be too strong or too weak.

Assessment of quality of *Kshara* - Apply *kshara* to the tip of the castor leaf & count the numbers from 1 to 100. If there is burning effect over the tip of the leaf, then the *kshara* is best for the therapy. If this effect appears before counting 100, then it is strong. Similarly if the action is delayed after counting 100 then it is called as mild.

Procedure of *Kshara karma*
1. Priliminary procedure -
i) Proper position - sitting or sleeping, which depends upon where we are applying *kshara.*
ii) Cover the rest of the body by clean sterile cloth, except the area of *kshara* application.
iii) Mark the area and apply *kshara* till you count from 1 to either 50 or in some cases till 100. This is between 45 to 90 seconds.
2. After care - *Kshara* is usually astringent and hot. Hebce apply the sour herbal juice or decoction after *kshara karma.* Then apply the mixture of ghee (clarified butter), liquorice and sesame paste.
This gives instant relief due to it's penetrating, cauterising, and breaking qualities. But at the same time remember that it can cause

severe bad effects on the body, if done by inexperienced person having no proper knowledge.

3. Contra indications - Weak individuals, children, old age, pregnancy, during M.C., with fever and diabetes.

6. Marma therapy and Acupuncture (*Suchi vedha*)

In the chapter on marma and sharira rachana (anatomy) we have explained in detail the concept of *Sira* (vessels). In modern anatomy there are no structures, which can be labeled as vessels carrying tridoshas. Hence we have taken for granted that the channels that carry tridoshas are the channels very similar to Pranic channels through which doshas flow all over the body.

Sushruta in *Sharira sthana* 8 *'Siravyadha'* has advised puncturing the channels (*sira*) by using needles, which are as small as *'vrihi.'* (*Vrihi* is the outer cover of the rice grain, which is pointed at both ends). This means that the acupuncture needles should be as pointed as vrihi. Needles now available of this caliber are of no. 26. (*Sharira sthana* chapter No. 8 *'Siravyadha'*).

For this purpose one should use disposable needle No. 26. With this needle the point which is tender should be punctured which is nearest to the marma. *Suchi vedha* is altogather different from *Siravyadha, in which blood comes out. Suchi vedha* is done on *Keshavahinya* (minute capillaries) in which there is no oozing of blood, but only pacifying effect on doshas.

Contra indications - In those who are afrain of the procedure, skin disease over the area of the procedure, pregnancy and emmediately after delivery. Like *agnikarma* therapy this should not be done on *sadyha pranahara* marma.

Like Agnikarma therapy this should not be done on *sadya pranahara* marma.

7. Marma Therapy by blood letting (*Rakta molshan*)

(To be done only by authorised registered medical practitioners)

Basti is an important therapy of Ayurvedic Medicine. Similarly blood letting at specific points and veins is most effective treatment of Ayurvedic surgery and marma therapy.

Types

a) with sharp knife or instrument (wide bore needle 16 or 18 no. and syringe)

The sub types are i) *Prachana* (Making abrasions by knife)

ii) *Sira vedha* (Puncturing vein by 16 or 18 no.

needle)
b) without sharp instruments, with the help of Leeches (*Jalauka*).
Sushruta, the great Ayurvedic surgeon, has classified sira (tubules, veins, arteries) in 4 types in sharira chapter no. 7
1. *Vata vahinya* (meaning through which vata flows), 2. *Pitta vahinya,* 3. *Kapha vahinya* and 4. *Rakta vahinya.*
It is very easy to understand that those termed as *'Rakta vahinya'* are veins and arteries.
As mentioned above, blood letting is carried out over visible veins according to the indicated area. It is never done on the arteries.
Sushruta has also mentioned that the thickness of the *vahinya* varies in the body. *Keshavahinya* (Kesha = Hair, vessels as thin as hair) is the term used to describe fine capillaries or terminal minute vessels which are spread all over the body. These are the vessels that carry all the doshas. For balancing the doshas, these are punctured by fine needles having the size of *vrihi-mukha* (no. 26, 27 & 28). He has mentioned that *sira vedha* (blood letting) should be done at the point neares to the marma.
Blood letting type of marma therapy is indicated when Pitta and its sub types are vitiated. Similarly vitiation of *rakta dhatu* (blood) also needs this type of therapy.
Preparation - Prepare the individual by doing massage and sudation. Give soup or hot liquid diet medicated with herbs according to dosha. Give proper position. Apply the tourniquet if necessary over the area of *Sira vedha.*
Disposable scapl vein needles are used for puncturing the vein. No 16 to no. 18 are preferable for proper flow. Same needles are used by blood banks during collecting blood. Amount of blood letting depends upon the strength of the individual and severity of the imbalance or disease. Range is between 100 to 300 c.c.
Contra indications - below age 16 and above 70 years, during pregnancy, after delicery, diarrhoea, anaemia, asthma, weakness, alchohalic, and when the veins are not prominently visible.

Chapter 12

Glossary

1. Medicated and aromatic oils

1. Agaru oil - Agaru, bilva, yashtimadhu and sesame oil (BR)
2. Amalaki oil - Amalaki, haritaki, bibhitaka, bilva, sariva, ela and sesame oil. (BR).
1. Amruta oil - Tinispora cordifolia, triphala and sesame oil (BR)
2. Arjuna oil - Decoction of the bark of arjuna and sesame oil (BR)
3. Asana eladi oil - Asana, ela, jeevanti, bilva, bala roots, deodara, sesame oil. (SY).
   Asana-bilvadi oil- Asana, bilva, bala, amruta, camphor, milk, coconut oil. (SY).
4. Ashwagandhadi oil- Ashwagandha and sesame oil.
5. Bala oil - Bala, guduchi, rasna, ela, agaru, manjishtha, atibala, licorice, tulsi, lavanga, kankola, nafgakeshara and sesame oil (AH).
6. Bilvadi oil - Bilva and sesame oil (BR)
7. Brahmi oil- Brahmi and coconut oil (BR)
8. Brihat Saindhavadi oil- Rock salt (saindhava), arka, maricha, chitraka, haridra and sesame oil (BR).
9. Bhrungaraja oil - Eclipta alba, manjishtha, lodhra, bala, daruharidra, licorice, sandalwood, and sesame oil (BR).
10. Bhrungamalakadi oil -Juice of bhringaraja and amalaka, licorice, milk and sesame oil. (SY).
11. Chandanadi oil - santalum album, licorice, vetivera zizanoides, jatamansi, agaru, bala, bilwa, kutki, sesame oil (YR)
12. Chandan-bala-lakshadi oil - Red and white sandalwood, bala root, laksha, madhuka, deodaru, manjishtha, agaru, ashwagandha, rasna and sesame oil (YR)
13. Dashamuladi oil - Dashmula and sesame oil.
14. Devadarvyadi oil - Devadaru and sesame oil.
17. Dhanvantara oil - Bala roots, cow's milk, kushtha, bilva, patala, agaru, sandalwood, vacha, punarnava, licorice, sariva, haritaki,

amalaki, (AH and Vaidya Yogaratnavali)

18. Doorvadi oil- Durva, nimba, narikala ksheera, licorice and coconut oil (AH).
31. Gandha oil - herbs in kakolyadi group (kakoli, kshira kakoli, black gram, medha, mahameda, guduchi, jeevanti, kakadshingi, vanshalochana) cow's milk and sesame oil. (AH)
32. Himasagara oil - Shatavari, kushmanda, vidari, tagara, chandana, manjishtha, agaru, licorice, lodhra, musta, shalmali and sesame oil. (BR)
33. Jeerakadi oil - Jeeraka and sesame oil.
34. Jyotishmati oil - Jyotishmati, apamargaand apamarga. (YR)
35. Karpas- asthyadi oil - karpasa seeds, bala, masha, rasna, deodaru, punarnava, shigru, kushtha, coconut oil. (SY)
36. Kshara oil - Plant alkali of apamarga, vacha, shunthi, kushtha, deodaru and sesame oil (BR).
37. Kshirabala oil- Bala roots, cow's milk, sesame oil. (AH)
38. Kottamachukadi oil - Kushtha, musta, acorus calamus, garlic, deodaru, sesame oil (SY)
39. Kumkumadi oil - Kumkum, ushira, laksha, chandana, yashtimadhu, nagakeshara, manjishtha, sesame oil.
40. Lakshadi oil - Laksha, haridra, manjishtha and sesame oil. (BR).
41. Lashunadi oil - garlic and sesame oil.
42. Masha oil - Masha and sesame oil.
43. Mahamasha oil - Masha, dashamula, vacha, maricha, gokshura and sesame oil (BR).
44. Mahanarayan oil - Bilva, ashwagandha, bruhati, gokshura,, bala, kantakari, atibala, rasna, deodaru, agaru, haritaki, ela, licorice, vacha, sesame oil (BR).
45. Manjishthadi oil - Manjishtha, sariva, musta, katuka, jatiphala, triphala, kushtha, jatamansi, juice of kumari and sesame oil (SY).
46. Maha manjishthadi oil - Manjishtha, bilva, agnimantha, patala, bruhati, bala, rasna, ashwagandha, punarnava, atibala, sandalwood, manjishtha, kushtha, ela, musta, camphor, sesame oil (BR).
47. Nalapamaradi oil - juice of fresh curcuma, parpata, udumbara, plaksha, triphala, agaru, kushtha, and sesame oil (SY).
48. Narayan oil - Shatavari, dashamula, punarnava, ashwagandha, kantakari, jatamansi, vacha, kushtha, milk and sesame oil. (BR)
49. Nimba oil - juice of leaves of nimba and sesame oil.
50. Nimba patradi oil - Juice of leaves of nimba, eclipta alba, shatavari, manjishtha, licorice, ushira, musta, amruta, sariva, milk and sesame oil (SY).
51. Nirgudi oil (shefali oil) - juice of nirgundi and sesame oil.

52. Padmakadi oil - lotus stem, doorva, sesame oil.
53. Pinda oil - Bee wax, manjishtha, sarjarasa, sariva, dhanyamla, sesame oil (AH).
54. Sahachara oil - Sahachara, bilva, gokshura, chandana, shilajita, and sesame oil (AH).
55. Shankhapushpi oil - Shankhapushpi, bilva, agaru and sesame oil.
42. Triphaladi oil - Triphala, guduchi, bala, eranda, kushtha, ushira, musta, milk, sesame oil. (SY)
56. Vacha oil - Vacha, haritaki, laksha, kutaki and sesame oil
57. Vacha lashunadi oil - Vacha, lashuna and sesame oil.
58. Vishagarbha oil - Datura alba, kushtha, vatsanabha, vacha, chitraka and sesame oil (YR).

Abbreviations used

AH - Ashtanga hridaya.
BR - Bhaishajya ratnavali.
SS - Siddhayoga Sangraha
SY - Sahasra yoga
YR - Yoga ratnakara
CD - Chakra Datta

2. Marma names in Sanskrit and their meaning.

Talahridaya - center of the sole or palm.
Kshipra - quick.
Kurcha- a knot or bundle.
Kurchashira- the head of kurcha.
Manibandha- bracelet.
Gulpha- ankle joint.
Indrabasti- Indra's bladder.
Kurpara- elbow joint.
Janu- Knee joint.
Ani- the lower region of the upper arm or leg.
Lohitaksha- 'Red eyed', the lower frontal end of the shoulder joint and leg joint.
Kakshadhara - 'What upholds the flank' the top of the shoulder joint.
Vitapa- the perinuim, where the legs are connected to the trunk.
Guda- anus.
Basti- bladder.
Nabhi -umbilicus.
Hridaya- heart.
Stanamula - root of the breast.
Stanarohita- upper region of the breast.
Apastambha- A point on the upper side of the chest said to carry the Prana or the life force.
Apalapa- ungarded, the armpit or axilla.
Katikataruna - 'what arises from the sacrum'. The center of the buttocks.
Kukundara- marking the loins, on either side of posterior superior iliac spines.
Nitamba- the upper region of the buttocks.
Parshva sandhi - the joint of the sides.
Brihati- 'The large' or the broad region of the back.
Amsaphalaka - The shoulder blade.
Amsa- The shoulder.
Manya - 'Neck'.
Nila- dark blue- from the colour of the veins.
Sira Matruka - The mother of the blood vessel.
Krikatika - The joint of the neck.
Vidhura - 'Distress' due to its sensitiveness.
Phana -'A serpent's hood' - the side of the nostrils.
Apanga - the outer corner of the eyes.

Avarta - 'Calamity' from its sensitiveness.
Shankha - 'Conch' - the temple.
Utkshepa - 'What is thrown upwards'- above the temples.
Sthapani- 'What gives support'.
Shringataka -'Place where four roads meet'- the soft palate of the mouth.
Simanta - 'The summit'.
Adhipati - 'The overlord'- crown of the head.

3. Herbs and their Botanical names

Agaru - Aquilaria agalocha
Amalaki- Embilca officinalis
Amruta - see guduchi
Apamarga - Achryanthus aspera
Arjuna - Terminalia arjuna
Ashwagandha - Withania somnifera
Atibala - Sida rhombifolia
Bala- Sida cordifolia
Bhringaraja - Eclipta alba
Bibhitaka - Terminalia belerica
Bilva -Aegle marmelos
Brahmi - Centela asiatica
Brihati - Solanum indicum
Chandan- Santalum album
Chitraka - Plumbago zeylenica
Deodar- Cedrus deodar
Ela - Eletteria cardamomum
Eranda - Ricinus communis
Gokshura - Tribulus terrestris
Guduchi- Tinospora cordifolia
Haritaki - Terminalia chebula
Jatamansi -Nardostachys jatamansi
Jeeraka- cumin, Carum carvi
Jeevanti - Leptadenia reticulata
Jyotishmati - Celastrus paniculata
Kapikacchu - Mucuna pruriens
Karpasa -Gossypium herbaceum
Karaja - Pongamia glabra
Katuka - Picorrhiza kuroa
Kumkuma - Crocus sativus
Kushtha- Saussurea lappa
Kushmanda - Benincasa hispida
Licorice- Glycerrhiza glabra
Laksha- Lacifera lacca
Lavanga - Syzgium aromaticum
Lodhra - Symplocus racemosus
Manjishtha- Rubia cordifolia
Masha - Phaseolus roxburghii
Musta - Cyperus rotundus

Nagakeshara - Mesua ferrea
Nimb - Azadirechta indica
Neem - see nimb
Nirgundi - Vitex negundo
Padmaka - Nelumbo nucifera
Parpata - Fumaria pervaiflora
Patola - Trichosanthes cucumeria
Punarnava - Boerrhavia diffusa
Rasna - Pleuchea lanceolata
Sahachara - Barleria prionitis
Shatavari - Asperagus racemosus
Shigru - Moringa pterigosperma
Shunthi - Zingiber officinalis
Triphala - Three myrobalans - fruits
Udumbara - Ficus religeosa
Vacha - Acorus calamus
Vatsanabha - Aconitum ferox
Vidanga - Embelia ribes
Vidari - Ipomea digitata
Yashtimadhu - see licorice

4. Research work done on Marma in various Universities and Institutes

1. *Marma sadhya-sadhya Vijnyanam* -(Prognosis and Marma) - D.P.Pathak- P.G.Institute, Jamnagar, 1956.
2. *Shakhagata Marma* - (Marma in extremities)- Sand B.N.- P.G.Institute, Jamnagar, 1964.
3. *Rujakara Marma* - (Marma which causes severe pain) -Raju U.G. - National Institute of Ayurveda, Jaipur, 1983.
4. *Sharirantargata Kalantara Pranahara Marma* - Saini B.C.- P.G.Institute, Jamnagar, 1985.
5. *Sandhi Marmo Ka Samanya Pariprekshya me Simanta Marma ka Vaigyanika Adhyana-* (Study of Marma involving joints with special reference to Simanta Marma) - Gupta N.B. - National Institute of Ayurveda, Jaipur, 1991.
6. *Kshipra Marma ka Vivechanatmaka Adhyayana* (Study of Kshipra Marma) -Gupta S.K.- National Institute of Ayurveda, Jaipur, 1991.
7. Marma *Sharira* and its relation to abhigata - (Marma anatomy and its relation to external injury)- Agte V.D.- Pune University, 1992.
8. *Gudamarmacha Sadyha Pranahara Abhyasa-*(Study of Guda Marma in relation to its instant death effect when injured)- Patil Y.A. -Pune University, 1993
9. Study of *Prushthagata* (back) Marma- Valvi M.D. - Pune University, 1993.
10. To investigate biochemically different components of Kapha-Pitta-Vata *doshanashaka* Marma - Mrs. Bale A.P.- Pune University, 1994.
11. *Sadyha Pranahara Marma Abhyasa* -Basti (Study of basti in Vital points producing instant death)- Shinde S.R.- Pune University, 1994.
12. Anatomical localization of *shakhagata avedhya shira* with special reference to Lohitaksha and Urvi Marma -Shelke D.S. - Govt. Ay. College, Nanded- 1994
13. A discussion of *Shirastha* Marma with special reference of identification of Shringataka Marma - Korde N.P.- Pune University, 1995
14. *Kakshadhara* Marma - *rachana* and its *vaikalyakaratva parikshana* - (Anatomy of Kakshadhara Marma and its examination in relation of its effect as disability)- Nehre R.K.-

Govt. Ay. College, Nanded - 1995
15. *Vaikalyakara* Marma with reference to Kurpara Marma -Mule S.-Govt. Ay. College of Nanded -1996
16. Late Stroke rehabilitation using marma therapy - A pilot study - Starr J.M., Petty R, Ali M, Purkit D, Impallomeni M - Geriatrics Services Unit, Royal P.G.Medical School, Hammersmith Hospital, London, U.K.

Chapter 13

Bibliography

1. A history of Zen Buddhism - by Dumoulin Heinrich, New York, 1963
2. Acupuncture Marma and other Asian Therapeutic Techniques - Dr. D.G.Thatte, Published by Chaukhamba Orientalia.
3. Ayurvedic Accupuncture - by Frank Ros, Lotus Press, wisconsin, U. S. A. 1994.
4. Dictionary of Chinese Buddhist Terms - by Soothil William, London, 1932.
5. Karate's History and Traditions -by Bruce A Haines, Published by Charles E Tuttle Ccoy, Yokyo, Japan, 1979
6. The art of Varmam - A historical study - Ph.D. thesis by M. Manickavasagam, Dept. of History, University of Madras.
7. True Yoga- by William Zorn, Published by Thomas and Company, Preston, London, 1996.
8. The unknown Kamasutra- by Dr. P.K. Agarwal.
9. The Martial Arts- by Michel Random Published by Peerage Books, London, 1985.
10. The art of War in Ancient India- by P.C. Chakkaravarti, Oriental Publishers, Delhi, 1972.
11. Varma sutram 100 - by Mr. John Selvara tamil work I.I.T.S. Publication, Madras, 1984.
12. Yoga sutras of Patanjali - by Mukunda, Published by International Academy of Ayurveda, Pune, India, 1998.
13. Yoga key to Life- by James McCarteney, Published by Rider and Company, London, 1969.

Unpublished Manuscripts in paper and palm leaves

1. Odivu Murivu Sara Sutran 1200 - Sage Agastya.
2. Panjeeherana Pinnal Gnanam 1500- by Sage Agastya.
3. Varma Birangi 100.
4. Varma Urpana Sari.

5. Varma Sari.
6. Ponosi Thiravukol.
7. Varma Alavunool Piramanam.
8. Varma Adangal Murai.
9. Varma Kannadi Vols. 1 and 2.
10. Varma Odivu Murivu Sutram 700.
11. Sutcha Sutcham.

Original sources published in Tamil

1. Thirumanthiram- by Thirumoolar
2. Udalari Vilakkam- by Adi Shankara.
3. Sareera Shastram
4. Panja Patchi Shasatram- by Sage Agastya
5. Kokkoham- by Varathunga Pandiyan

RESOURCES

1. American Institute of Vedic Studies
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Tel. 001-505 - 983 - 9385 Email - vedicinst@ao1.com
Director, Dr. Dravid Frawely.
Offers correspondance course and information of astrology.

2. Ateneo Veda Vyasa
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4. Ayurvedic Institute of America.
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5. Ayurvedic Acupuncture Board of Acreditation
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6. California College of Ayurveda
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8. Foundation for Health Promotion - Fundacja Pomocy Zdrowiu
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Director-Zanna Kiesner

9. International Academy of Ayurveda
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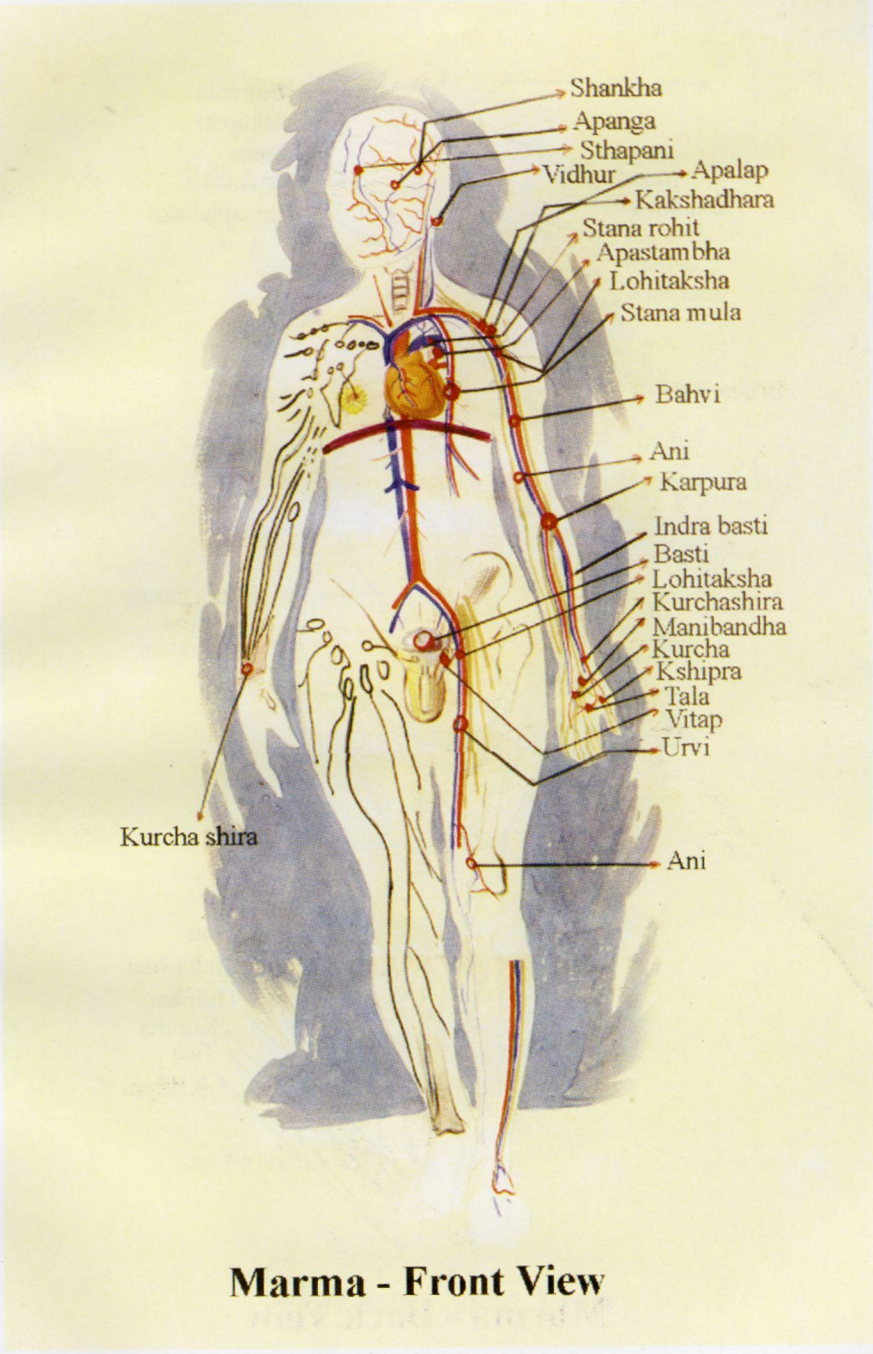

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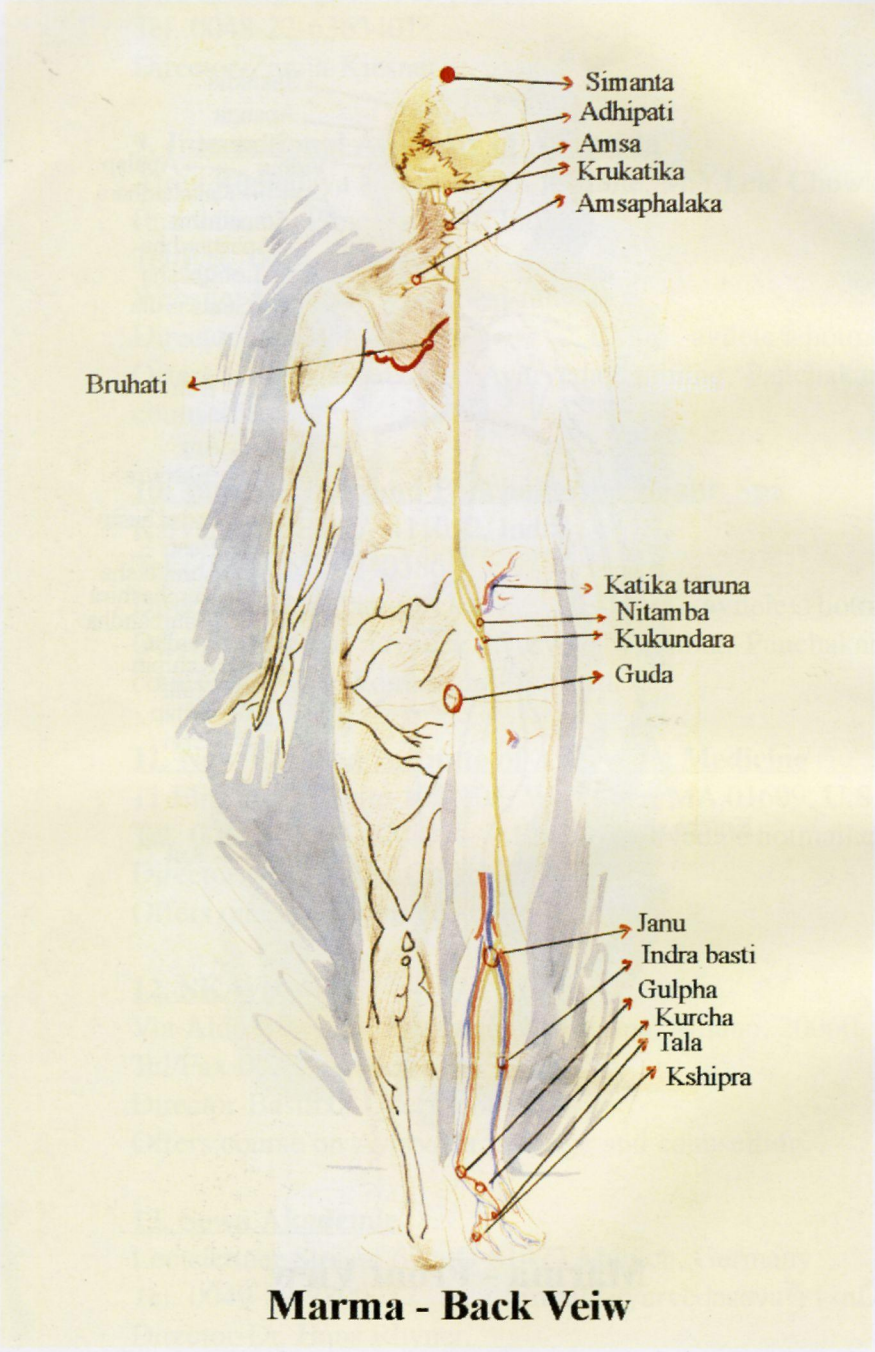

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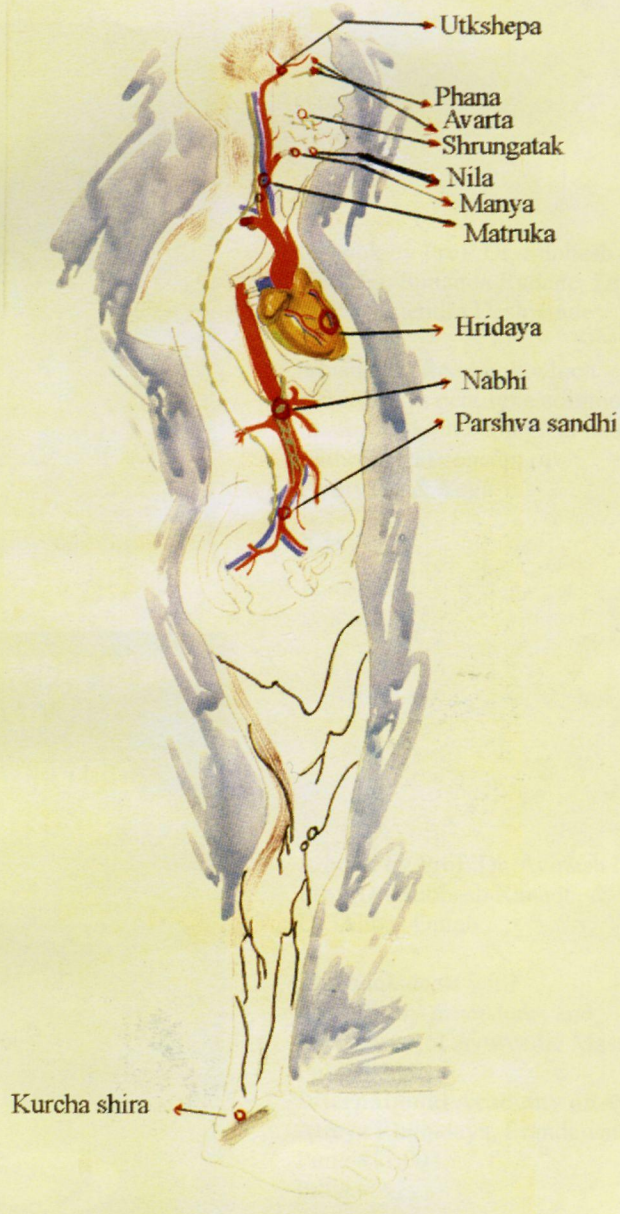

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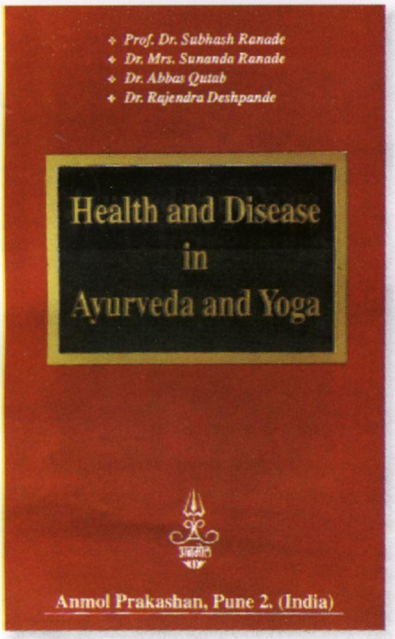
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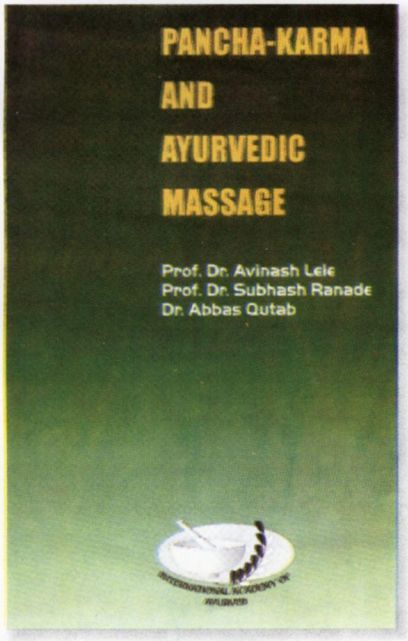

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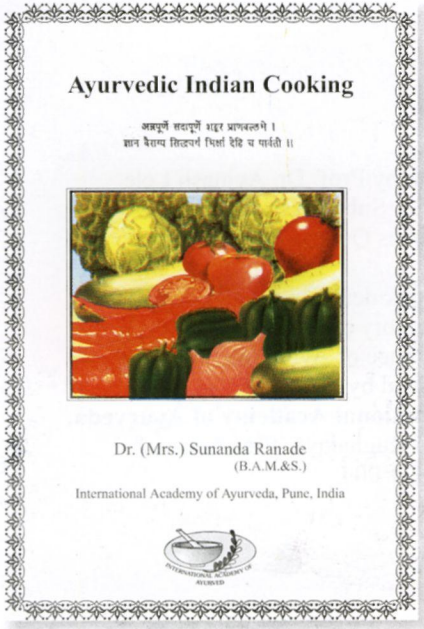
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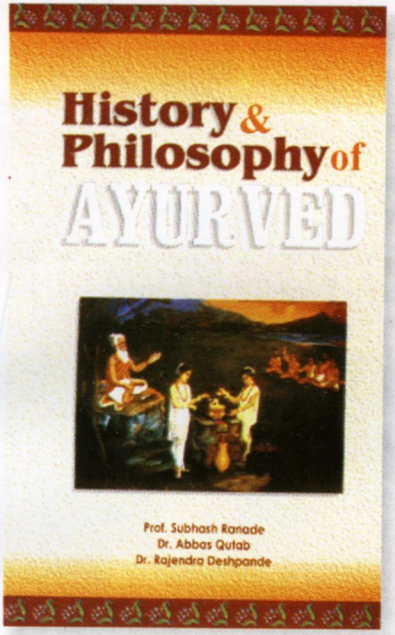

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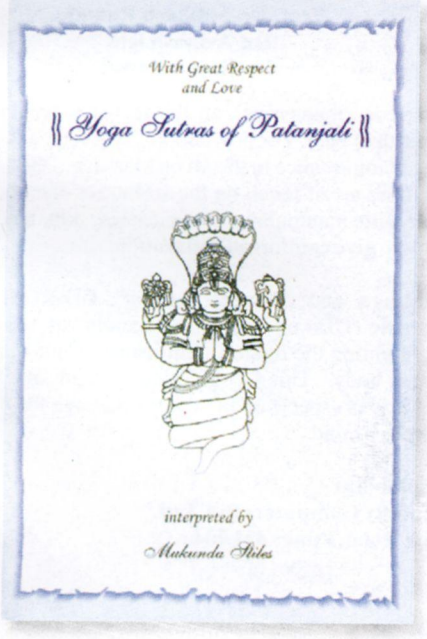

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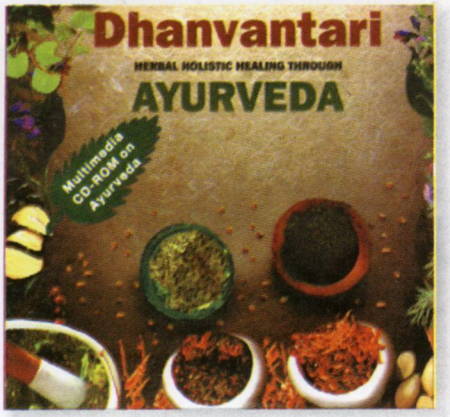

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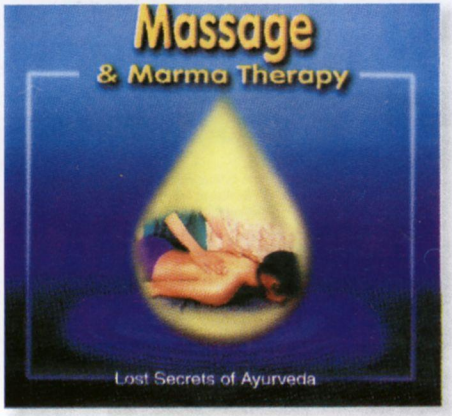

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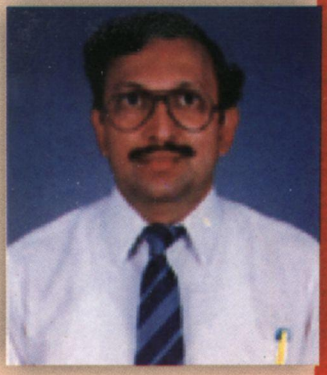
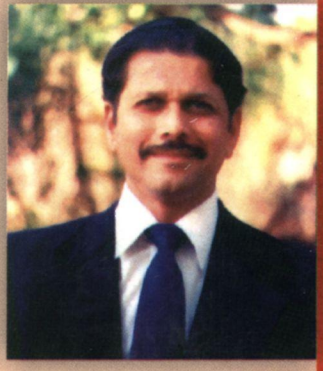
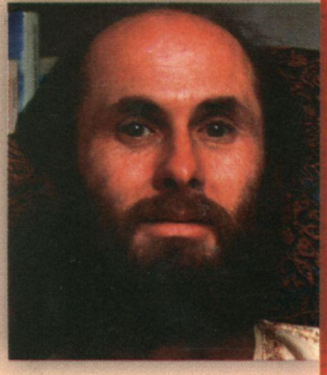


Dr. Avinash Lele is the director of International Academy of Ayurveda which is imparting education of Ayurveda, both in theory and practicals in Massage, Panchakarma, Marma and other special methods in Ayurveda. In his own private clinic, he has done thousands of Panchakarma procedures since 1980. He has his own private Ayurvedic hospital in Pune and is Hon. Physician and Professor of surgery at Ashtang Ayurveda College, Pune. He is also working as visiting professor to New England Institute of Ayurvedic Medicine in Boston, California College of Ayurveda, Ayurvedic Institute of America in U.S.A. and Ateneo Veda Vyasa in Italy.



Dr. Subhash Ranade has recently retired as Principal of Ashtang Ayurveda College, Pune, India and is the author of more than 50 books on Ayurveda which have been published in German, Polish, Italian, English and many Indian languages. He has the honour of being visiting professor to all the colleges of Ayurveda in U.S. and other institutes like Sewa Akademie in Germany, Ateneo Veda Vyasa in Italy, Foundation of Health in Poland and Ayurveda International Diffusing Association of Japan. Since 1981, he has visited and has conducted hundreds of Ayurveda courses for medical practitioners in Europe, U.S.A. and Japan.



Dr. David Frawley is recognized as leading Vedic Scholar, astrologer and Ayurvedic academician. His books on astrology, Ayurveda and Yoga Philosophy have been published in U.S.A. and in India. Apart from being the director of American Institute of Vedic Sciences, he is on the advisory council of various institutions in Europe, U.S. and India.